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APRIL, 1914

# THE INDUSTRIOUS HEN

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1st Prize Ck., Ky. State Fair, 1913

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## EVERLAYING SINGLE COMB White LEGHORNS

Winners at all of the leading shows, including the Kentucky State Fair, where we won 1st, 2nd cock; 2nd hen; 2nd cockerel; 1st, 2nd pullet; 1st pen and best display, making practically a clean sweep in the largest class of Leghorns ever shown at this Fair. We have 21 breeding pens of range-raised birds, all strong and vigorous; every one a proven egg producer. 5,000-egg incubator capacity—can furnish day-old chicks in any number. Eggs and chicks ready for delivery Jan. 1. Write for mating list.

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Office, State Life Building, INDIANAPOLIS, INDIANA

# ANDERSON'S MINORCAS Win State CHAMPIONSHIP

At Lynchburg, Va., Jan. 13-16, 1914, the State Meeting of the American Black Minorca Club, in the hottest competition, I won 1st and 3rd cock; 1st, 2nd, 4th and 5th hen; 2nd and 5th cockerel; 2nd, 3rd, and 4th pullet, and 1st pen. American Black Minorca Club State Cup for the best cock, hen, cockerel and pullet shown by one exhibitor. This, with my remarkable winning of all "five" firsts at Atlanta, places my Minorcas as the "best in the South."

R. H. ANDERSON

LYNCHBURG, VIRGINIA

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When you pay \$10.00 for a setting of fifteen (from our best breeding pens) we say: "This man wants fifteen eggs; he has paid us sixty-seven cents each for them and we want him to get at least one dollar in value for every single egg." Not only that, but we see that he gets it. And if you buy eggs from our fine flock of free range White Wyandottes for \$10.00 per hundred, we give you more for the money than you can get anywhere else. How can we do it? From a lifetime of experimenting, of perfecting, of selecting, mating and selling. From our experience with Poultry and Prospects, we know what the fowls must be and what the prospects must have. We have told you about White Wyandottes. So many of them that we know you have not been able to remember all of them. But if you want more evidence, more proof, before you buy send for our catalogue. If you want your eggs on time—"when you want them"—order direct from this advertisement. It would be unfair to put your order ahead of those we received ten days ago, and we cannot do it. First come, first served.

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BOX 11,

HOPE, INDIANA

## White CORNISH

HEAVIEST IN AMERICA; WIN EVERYWHERE. At the greatest and largest "American Cornish Club Show" ever held (over 300 birds) we received as follows: 5 firsts; 4 seconds; 5 thirds; 1 fourth; 1 fifth; and 6 specials. Cock, 1, 2, 3 and 5; hens, 1, 3 and 4; pullets, 1, 2 and 3; 3rd cockerel; young pens, 1, 2 and 3; old pens, 1 and 2. Best male. Best female, best pair. Best display, most number of ribbons, and Hon. C. C. Carlin's cup for best cock, hen, cockerel, pullet and pen—all varieties competing.

MOUNTSVILLE FARMS

Loudoun County

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Not too late for a setting of good ones. February hatched chicks showing up fine. Order now. Don't delay.

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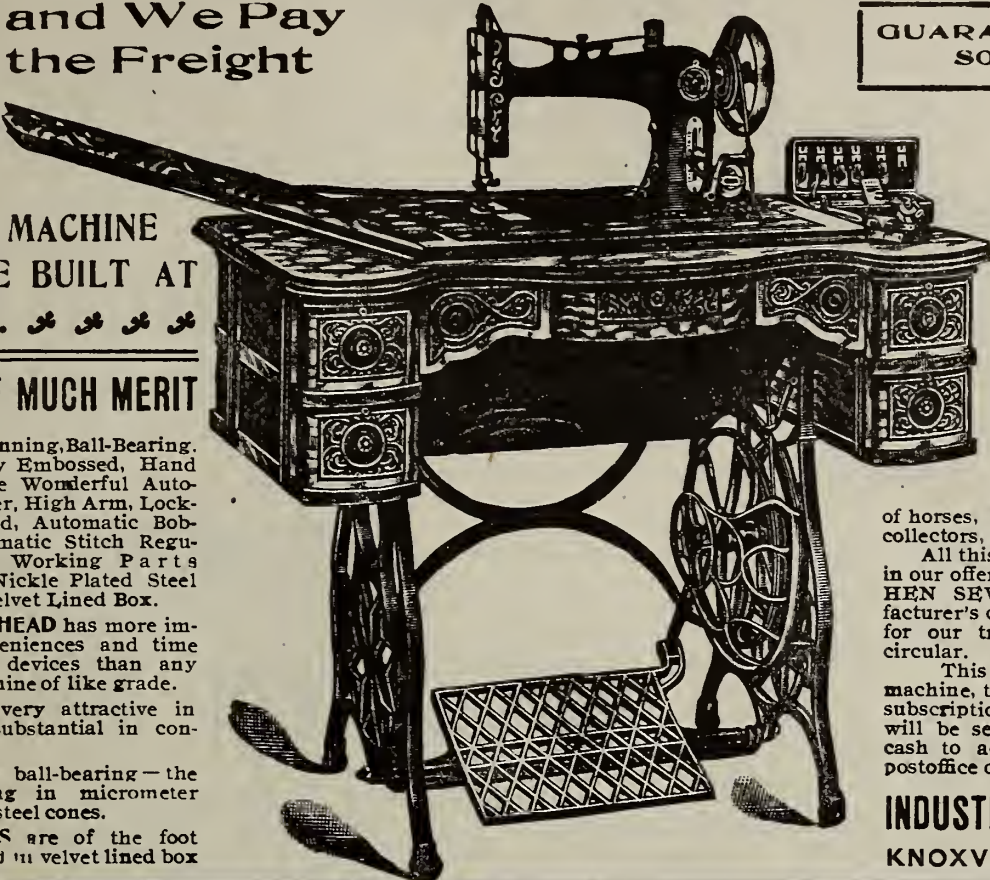
Noiseless, Easy Running, Ball-Bearing, Stand Handsomely Embossed, Hand Polished Case, The Wonderful Automatic Belt Replacer, High Arm, Lock-Stitch Sewing Head, Automatic Bobbin Winder, Automatic Stitch Regulator. All Steel Working Parts Hardened in Oil, Nickel Plated Steel Attachments in Velvet Lined Box.

THE SEWING HEAD has more improvements, conveniences and time and labor saving devices than any other sewing machine of like grade.

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All this expense is eliminated by us in our offer to you of the **INDUSTRIOUS HEN SEWING MACHINE** at manufacturer's cost, plus a small commission for our trouble. Send for descriptive circular.

This high-grade family sewing machine, together with a year's paid up subscription to the "Industrious Hen" will be sent freight paid for \$17.00 cash to accompany order. Send check, postoffice order or registered letter to

**INDUSTRIOUS HEN COMPANY**  
KNOXVILLE, TENNESSEE

**MAYWOOD**  
POULTRY FARM  
ANCHORAGE  
Eugene J. Straus.

Breeder of Exhibition  
and High Class Utility

**WHITE LECHORNS  
WYANDOTTES**

Write for catalogue, breeding stock, baby chicks, eggs for hatching.

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**WINNINGS 1913**  
Louisville, Nashville,  
Hopkinsville,  
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1914—Indianapolis

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## Black LANGSHANS

Winners Augusta, Ga., Grand Central Palace, N. Y., Philadelphia, Pa., etc. Send for catalogue. DR. PETER HICKS, Box 334, Bound Brook, New Jersey.

## NORWOOD POULTRY FARM

Get Norwood Poultry Farm's mating list. Won 52 firsts, 4 shows, 1913. Orpingtons, Reds, Anconas, Campines, Polish, Indian Runners and Buff Orpington Ducks. Eggs cheap. NORWOOD POULTRY FARM, Norwood N. C.

## LOOK HERE FRIENDS

I have been breeding Single Comb R. I. Reds and White Wyandottes for 10 years. During this time I have never failed to win my share of the premiums in all the leading shows in the South. Now if you want eggs for hatching from the best blood lines, give me your orders at \$3.00 per 15. W. M. ROSEMOND, Pickens, S. C.

## Salmon Faverolles, Anconas

Faverolles are the greatest all-purpose fowl known. Winter King layers. Eggs \$1.25 per setting or \$3.00 per 50. Anconas are living egg machines. Lay all the year round. Both breeds are non-setters. Guarantee with every order. Stock for sale of above breeds; also few Black Orpingtons at reduced prices. VINELAND POULTRY YARDS, Tullahoma, Tennessee.

## R. Rhode Island Reds

If you want the best Reds in the world or simply common, cheap Reds, do not send to me. I have neither. Mine are fine, well-bred birds. Winners, year round layers, hence payers. You want some eggs to hatch from these. Write for mating list. D. MATT THOMPSON, Box B, Statesville, N. C.

## Todd's Show You WHITE Wyandottes

They did show you 1913 Missouri laying contest; won fourth, 1759 eggs, defeating all other White Wyandottes and all Leghorns in contest except one English pen. Arkansas State Fair and Pine Bluff show they made a clean sweep. There is a reason. Free circular tells why. Eggs \$3 to \$6 per 15 prepaid. S. L. TODD, Green Forest, Ark., R. 1.

## POTTS' WHITE ROCKS

CAN CROW  
LOUD AND  
BACK UP THE  
CROW

in eggs and in their show record  
—3 firsts, 4 seconds, 1 third, 1 fourth, 3  
specials on 10 entries at 3 BIG 1913  
shows. Frank A. Potts, Charlotte, N. C.

## ROSE COMB REDS

Prize winners. Heavy layers. From grand pens mated for the egg trade. No more stock for sale until after June 1st. Ask for our mating list. MRS. H. R. NUSZ & SON, Box 300, Cecilian, Ky.

## White ORPINGTONS

If you could see my Orpingtons you would look no further for breeding eggs. Kellerstrass Crystal Whites raised "The Kellerstrass Way" \$5.00 per setting. Member American White Orpington Club. MRS. OLIVER PAYNE, Crossville, Tenn.



## Twice Told Tales

Funny Sayings of Funny People

### NO ESCAPE

A Southern congressman relates how, when he was once making a campaign through the interior of Mississippi, he came upon a negro cabin, across the threshold of which lay a negro man and a pickaninny of perhaps eight years of age, says Harper's Magazine.

"He's got a pretty fair appetite," remarked the congressman after a moment's silence, during which the pickaninny finished the plate of chicken and produced a huge section of pie.

"Purty fair, boss, purty fair," said the father. "Jes' look at him goin' after dat pie!" Then, after a further period of silence, the proud parent added:

"Boss, it ain't no use of a-talkin,' dat chil's got a pow'h'ful infloence over food. Onct he gets his upper lip ovah a piece o' pie, it's his pie, boss; it's his pie."—Grit and Steel.

### CHANGES

One hundred years ago today,  
With wilderness here;  
With powder in his gun the man  
Went out and got the deer.  
But now the thing is somewhat  
changed;

And on another plan;  
With powder on her cheeks, the  
dear

Goes out and gets the man.  
—Indianapolis Sun.

"You'll find my eggs are hard to beat,"

The grocer said with pride.  
"That's what I want 'em for;  
good-bye,"

The customer replied.  
—Dallas News.

The monologue artist was moving his audience to tears. "Dear old mother," he was saying, "I will never forget how she used to rock all of us children to sleep. There were nineteen of us, and by the time she had rocked us all to sleep the alarm clock rang and she had to get dad's breakfast."—Ex.



## "F.P.C. Chick Manna"

A complete prepared food for little chicks, turkeys, etc. Introduced 1884. The first chick food on the market and recognized everywhere as the best. Brings chicks safely through critical first ten days. "Chicks like it and thrive on it." Ask your dealer for it.

Write today for our Special Trial Offer by Parcel Post. Introductory offer to ship 1-lb., 5-lb., or a 15-lb. package, postpaid by mail. Send for free circulars of "F.P.C." Poultry Foods and Supplies. F. P. Cassel & Son. A-14 Lansdale, Pa.

## EGGS EGGS

From bred to lay Single Comb White Leghorns and S. C. R. I. Reds. My pens are mated up with high scoring birds and with good egg records. Eggs \$1 per 15 or \$5 per 100. I have 400 choice breeders, both White Leghorns and Reds that I will sell for \$1 each. All stock sold on approval. If not satisfied, I pay the charges both ways. HERBERT HAUN, Mohawk, Tenn.

## CHICKENS

Bred from heavy laying trap-nested Buff Rocks and Columbian Wyandottes. One month old, past the danger period, 12 for \$5; 50 for \$18. Bred from heavy trap-nested layers, Springfield and Rochester winners. Eggs, \$3 for 15; \$5 for 30. 14 years a breeder. OREN HANES, South Colton, N. Y., Box 11.

## CANCER

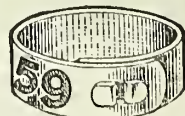
FREE TREATISE The Leach Sanatorium, Indianapolis, Ind., has published a booklet which gives interesting facts about the cause of Cancer; also tells what to do for pain, bleeding, odor, etc. Write for it today, mentioning this paper.

## WHITE ORPINGTONS

The kind that win and lay. A few choice birds for sale at attractive prices; also hens with their chicks. Eggs at half price after April 1st. LEEF POULTRY YARD, Rockingham, N. C.

## 24 LEG BANDS FREE

MAKE YOUR HENS PAY



We send free 24 of the best Leg Bands made to every new and renewing subscriber to THE INDUSTRIOUS HEN at 50 cents. 36 Bands will be sent with a three years' subscription for \$1.00. If you are already a subscriber you may renew; or if you will get your neighbor to send 50 cents for his subscription, we will send a dozen Leg Bands to each. Enclose money order or stamps. Mention "Leg Bands" when subscribing under this offer.

INDUSTRIOUS HEN CO.  
Knoxville, -- Tennessee.

"No legacy is so rich as honesty." Beats all; how negligent some legatees are in collecting their inheritance.

## WHITE WYANDOTTES

Winners and layers. Have sold my Reds. Will devote my time to Wyandottes exclusively. Eggs, \$2 and \$5. C. A. ADAMS, Route No. 1, Fairburn, Ga.



**Smith Sealed.**  
Prices postpaid  
—12,30c; 25,50c;  
60, \$1.00, 100,  
\$1.50; 500,  
\$6.50, 1000, \$12.50.

**LEG BANDS**

**Leader Adjustable.** Prices  
postpaid: 12,15c;  
25, 25c; 50, 40c;  
100, 65c; 250, \$1.15;  
500, \$2.75; 1000, \$5.25.

**FREE**  
Write postal or order  
now. Satisfaction  
guaranteed. Address  
THE KEYES-DAVIS  
CO., Inc., Dept. 520  
Battle Creek, Michigan

## QUALITY REDS

S. C. Rhode Island

Winners at Birmingham, Huntsville, Hartselle, Memphis and Cookeville. Eggs \$2.00 and \$3.00 per 15. Catalogue and mating list free. Send for it. **BALLEW BROS.**, New Decatur, Ala., Route No. 2.

**THE CLIPPER**  
will cut tall and short grass, do all trimming along walks, drives and fences. If your dealers haven't them, drop us a line and we will send circulars and prices.

**Clipper Lawn Mower Co.**  
5th St., Dixon, Ill.

## White ORPINGTONS

Eggs hatch, chicks live, grow and lay. Ninety-six per cent live for us. Eggs from heavy layers and prize winners \$2, \$3 and \$5 per setting. Baby chicks 25 and 50 cents. Breeders \$2 to \$10. Circular free. **LIVELY POULTRY FARM**, Augusta, Ga.

## Rhode Island WHITES

Baby chicks, eggs and old stock for sale at all times. Catalogue free. **ELAM M. LEARY**, Greenfield, Ind.

## Barred ROCKS

The Great Winter Layers. My birds have won at the largest shows in the State this season. Stock and eggs for sale. Prices right. Write for mating list and circular. **L. C. BREEDEN**, 308 E. Main St., Bennettsville, S. C.

**SURE CLINCH**  
 **ADJUSTABLE**  
 **DOUBLE END**  
 **CLINCH**

**Poultry Bands** Twelve Varieties  
You need one of our new illustrated catalogues to select your bands for the coming season. Why not get the best? You pay no more. Aluminum bands. Price postpaid. 12 for 15 cents; 25, 25 cents; 50, 35 cents; 100, 60 cents. **NATIONAL POULTRY BAND CO.**, Newport, Ky.

## Rose Comb REDS Exclusively

If you want the best R. C. Rhode Island eggs that are fully guaranteed at a satisfactory price, write for catalogue. **ROANOKE POULTRY FARM**, Sewell, New Jersey.

## GAMES

**DARK CORNISH INDIAN GAME.** Home of fancy line bred Dark Cornish. None other bred. Eggs for hatching a specialty, \$3.00 and \$5.00 per 15. Stock for sale. **STANDARD POULTRY YARDS**, J. R. Flanigan, owner, R. 4, Macon, Ga.

**Twice Told Tales**  
Funny Sayings of Funny People

### MARY'S LITTLE HEN

Mary had a little hen  
Upon her little farm,  
Against the wolf before the door  
It proved to be her charm.  
Each day it laid a little egg,  
Which Mary sold in town,  
And thus she bought her groceries  
And now and then a gown.  
The year passed on and Mary paid  
The little mortgage due,  
And sent her girl to boarding school,  
Her boy to college, too.  
She has a nest egg in the bank,  
And even keeps a cook,  
And everything about her, has  
A thrifty, well-kept look.  
Saye she, to those who daily fail  
With needle, brush and pen!  
"If you would do as well as I  
Just keep a little hen."—Ex.

### "QUITE RIGHT"

An amusing incident was reported from the New York show. A prominent breeder had entered a large string of birds and for some reason, best known to himself, decided to withdraw them from competition so placed on each cage a card reading: "Not in competition." Some wit after looking them over, wrote underneath, "Quite right, quite right"—Successful Poultry Journal.

We all complain of the shortness of life, yet waste more time than we can use.

Courtesy pays, and it pays as well when shown to your hired man as to your banker.—Farm, Stock and Home.

Some folks have tremendous perseverance when it comes to keeping tab on business that is no concern of theirs.

Photographer—"Full length or bust?"

Uncle Si—"Sure, an' if she busts, I guess I kin stand it."—Judge.

## PARTRIDGE PLYMOUTH ROCKS

Eggs from the Best Birds in the South at reasonable figures; also a few pens of fine young birds for sale. **JAKE M. BROWN**, H. P. Route 1, Chattanooga, Tenn.

## Use BAIR'S Bands

for marking your poultry and pigeons. Sample dozen Ideal bands marked with raised numbers for one dime. Mention your breed. Catalog Free. "BAIR, THE BAND MAN," Hanover, Pa., 54 Twilight Yards

## DUMARESQ BUTTERCUPS

Eggs and stock for sale from hens mated by ribbon winners and standard marked birds. My patrons have won ribbons at Boston show, Madison Square Palace Show, England and Canada. Write for circular. Address: (MRS. J. S.) **A. M. DUMARESQ**, Catos Hall, Easton, R. F. D. No. 5, Maryland, Treasurer The American Buttercup Club.

## S. C. WHITE LEGHORNS BARRED Plymouth ROCKS

Birds of superb quality. Have always won and are still winning at leading Southern Shows. Eggs, \$3 and \$5 per 15. **T. D. SMITH**, Route 8, Knoxville, Tennessee.

## Bertram's Great Rose Comb Buff Leghorns

With the frost-proof comb—winners, layers and great payers. Won this season, 36 firsts, 27 seconds, 9 thirds, 5 cups and many specials at Madison Square Garden. Grand Central Palace and all the biggest shows. Order eggs and stock now. **F. BERTRAM**, Bound Brook, N. J.

## Williams' S. C. MINORCAS Black

"Bred to Lay—Lay They Do"

Eggs from splendid mating headed by 1st prize winner \$2.00 per fifteen. Few utility pullets, laying every day. 2 utility cockerels. Prices reasonable. **HARLEY L. WILLIAMS**, Moultrie, Ga., R. F. D. No. 1, Box 1-H.

## The INDUSTRIOUS HEN

50c per year, and

## East Tennessee Farmer

50c per year

Both one year for 50c. (Knoxville postage extra.) Send order to **THE INDUSTRIOUS HEN CO.**, Knoxville, Tenn.

**NORTHUP'S MINORCAS.** This strain has no superiors. My stock are as near standard requirements as can be attained and are most wonderful layers. Cockerels, \$3.00 each; eggs, \$3.00 for 15; \$5.00 for 30. **MRS. J. R. CHILDERS**, Route No. 5, Fayetteville, Tenn.

**KRUGER LEGHORNS**  
SEND for CATALOG  
Eggs, and Chicks. For business and beauty. Large numbers pedigreed and trap-nested.  
**Kruger Egg & Poultry Producers**, Ave F, Sallis, Miss.



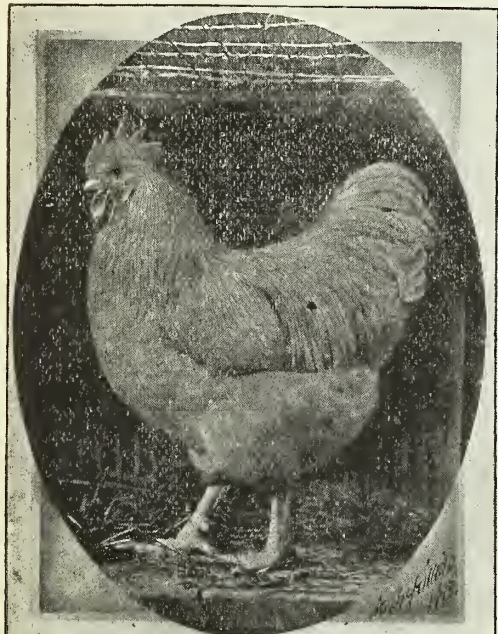
# WM. COOK & SONS ORIGINATORS

OF ALL THE

## Orpington Fowls and Ducks

BOX H

### SCOTCH PLAINS, NEW JERSEY



FIRST PRIZE SC-BUFF ORPINGTON COCKEREL AT  
MADISON SQUARE GARDEN N.Y. 1912-13  
BRED AND OWNED BY  
WM. COOK & SONS SCOTCH PLAINS N.J.  
ORIGINATORS OF ALL THE ORPINGTONS.

**EVENTUALLY** if you want the best Orpingtons, any variety, including the **Blue**, our latest production, you will send to their **Originators**. **Why Not Now?** and avoid loss and disappointment. A reputation of **forty-one** years stands behind our **guarantee** of **satisfaction**.

**Winnings in 1913**---356 prizes, including 170 firsts and 105 seconds. Over fifteen thousand first prizes won by us. **EGGS** from our winners and the finest Orpingtons in the world, \$20 a setting; and from fine stock, \$10. Several thousand stock birds always for sale.

**Send 10c for Illustrated Catalog**, containing history of the Orpingtons and hints on poultry keeping. **1914 Mating List Free**. Advice free. Inspection invited. **Cook's Orpingtons are recognized the World Over as the Best.**



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### THE INDUSTRIOUS HEN



# THE INDUSTRIOUS HEN

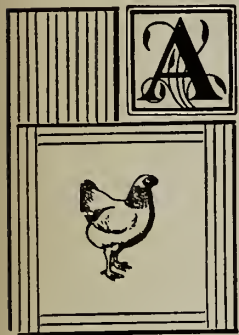
Vol. 10

Knoxville, Tenn., April, 1914

(Whole No. 119) No. 11

## The Value of Milk as a Ration for Poultry

By J. H. PETHERBRIDGE, Mt. Airy, Philadelphia, Pennsylvania



THE third International Egg-laying Contest, Storrs, Conn., among other experimental pens being conducted, there are several in which the value of milk is being tested as a substitute for beef scrap and also for succulent food. One of these pens (Leghorns) that are being fed the sour milk ration instead of beef scrap has up-to-date a laying record that would place them in fourth position were they in regular competition. We understand that the poultry department of the Purdue University has been for over three years experimenting with the feeding of sour skim milk to laying pullets; as the result of their experience, the advice of the Purdue experts is briefly, "feed your skim milk to hens and buy tankage for the hogs. The feeding value of milk is \$1.73 for hens and 45c for hogs. Milk seems to assist in keeping the birds healthy; they look better, will be healthier, can lay more eggs and be more profitable if an abundance of skim milk is fed. Skim milk is the sure method of bringing winter eggs."

ment of the Purdue University has been for over three years experimenting with the feeding of sour skim milk to laying pullets; as the result of their experience, the advice of the Purdue experts is briefly, "feed your skim milk to hens and buy tankage for the hogs. The feeding value of milk is \$1.73 for hens and 45c for hogs. Milk seems to assist in keeping the birds healthy; they look better, will be healthier, can lay more eggs and be more profitable if an abundance of skim milk is fed. Skim milk is the sure method of bringing winter eggs."

A Mr. C. L. Peck in the Dairyman, says: "For the past season and a part of the previous one, I have fed skim milk to seventy hens and about one hundred and forty chicks. At first I fed hens all the sweet skim milk they desired to eat. I found they took too much so their digestion was affected. Beginning last May I again took up the matter, taking the advice of an experienced poultryman. I have a large milk can holding about 45 gallons. The skim milk was put into this and when it soured and clabbered so that the curd came to the surface. I skimmed off the thick milk feeding it freely to the mature hens. I found my hens were soon laying more eggs than I had ever got from them before, with about one-half the grain feed I had formerly fed. It almost entirely took the place of meat scrap. I took a rubber syphon and drew the whey from the bottom of the can and kept it where the hens had free access to it as a drink. I found they took it greedily with no ill effects. I found that for younger chicks the curd needed to be left until a little harder."

"My hens continued laying more liberally than ever before and long after those of my neighbors had practically ceased. About the middle of September the dry weather and the calves and pigs cut off my skim milk supply. I found my egg supply cut off about half. An increase of grain feed failed to restore it. I found I could substitute the skim milk for over one-half of the grain feed with better results than on grain feed alone. My hens, while increasing in egg supply, were also keeping

in splendid flesh condition. My estimate of the value of skim milk is fifty cents per 100 pounds as a poultry feed. My young turkeys did nicely on the curd. I began feeding it to them at about a week old in connection with bread crumbs and cracked oats. I never had chicks or young turkeys do better. I found I could cut out the meat scraps with no diminution of egg supply. I carefully watched the roosts for any evidence of indigestion and found none. Everything showed excellent physical condition while being fed the curd."

We quote the preceding almost in full because it brings out the point we wish to call attention to, as not only a vital one, but one that might very easily be overlooked. Please note that all these experiments and experiences speak of sour milk; that Mr. Peck says he at first fed sweet skimmed milk, but found that they took so much that their digestion was impaired. Even without waiting the outcome of the experiments now going on at Storrs's,

we can assume that it is already fairly well established that soured milk is an excellent ration for laying hens, but we have failed to note sufficient warning to poultrymen that although soured milk is good, the feeding of sweet milk should be depreciated. And why this is so is very ably explained by Dr. T. P. Shaw, of Montreal, Canada, in an article appearing in February American Poultry Journal, said article bearing the title of the "Physiology of Digestion in Domestic Fowls."

We quote: "We have another ferment in the stomach, called rennin, which acts on the casein of milk, forming a curd, \* \* \* This action is not very well developed in birds, as milk is not their natural food \* \* \* In most animals ferment was present in the intestinal juice which acts on milk sugar. This ferment is absent in poultry and they

on bacteria to break up milk sugar." The author found that chicks could not digest milk sugar and when pasteurized milk was fed alone to chicks

it caused irritation of the stomach and intestines and the chicks suffered from lack of digestible carbohydrate in the food. \* \* \* "The action of bacteria on milk is a good example of the way bacteria aid digestion in the fowl. \* \* In the souring of milk the lactic acid bacteria change part of the milk sugar first into glucose and then to lactic acid, so we see that our milk will contain some glucose which is the form in which sugar can be absorbed by the fowl."

Moral—Shakespeare said: "Things sweet to taste prove in digestion sour," but Dr. Shaw shows us that the converse, as regards the feeding of milk to poultry is likewise true.

A sovereign remedy for limberneck is four drops of turpentine in a teaspoonful of water. Limberneck is caused by eating some dead animal matter that has bred maggots.





# A Few Facts About Indian Runner Ducks

By MRS. R. L. PORTER, Cheneyville, Louisiana



IN A FORMER ARTICLE to some of the papers I have written of one distinct advantage of the Indian Runner Duck. In this article I am going to tell about a few more, and then there will be some. The ducks I raise here on my poultry plant at Cheneyville, La., are the White Runners. I raise the White because they always come true to color and every duck is marked exactly alike so far as color is concerned. I find these ducks respond readily to scientific breeding. By proper

mating I have bred a number of exhibition ducks that have won blue ribbons at our several fairs. The White Runners lay a pure white egg. I have picked up eggs by the thousands from my pens and have never found a tinted one. They lay when eggs are the highest price, and when there is a general scarcity of eggs over the country. With proper treatment and feed they will shell out the eggs all winter long. They will lay 250 or more eggs per year. I kept a record on one duck that I put in a pen to herself and in 141 days she laid 126 eggs. After that I sold her. They are non-setters. I have never had but one duck to offer to set. I looked in the house twice at her while she was on the nest and she became so frightened she left it and never tried it again. This beats working with an old broody hen that wants to set after every litter of eggs and that has to be thrown off the nest, locked up in a coop, ducked in a barrel of water, chased all over the place for six or seven days before you can break her up.

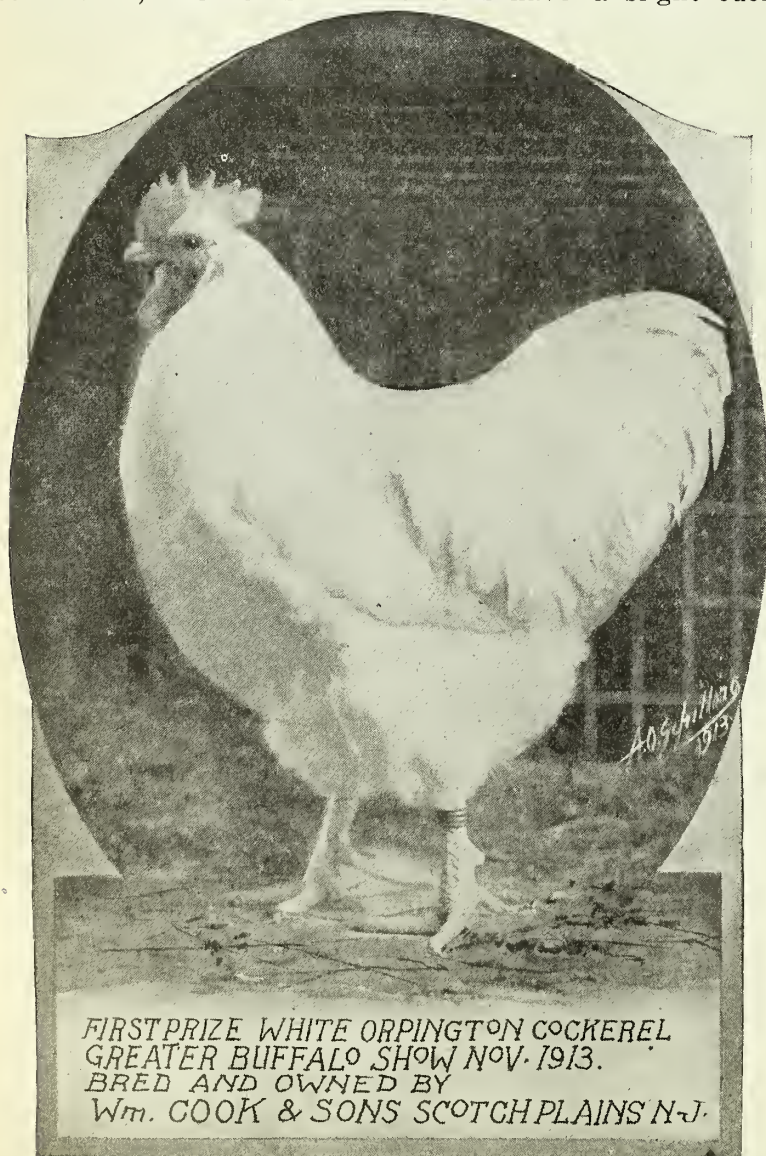
The Indian Runner egg is desirable for table use. You have read this before but I am going to tell you something that I know from experience. These eggs, hard boiled, hard fried or scrambled, well done, can not be told from chicken eggs. There are seasons of the year when soft boiled, fried or scrambled ones have a slight odor

to them, but this is sometimes true of chicken eggs. These ducks will lay in a nest on clean straw if one is provided for them, but if they are allowed to lay in their own filth on damp ground and the eggs are left there half a day or longer, they will absorb odors that are disagreeable. Chicken eggs will do the same thing. For those who like eggs well done, the Indian Runner egg is a boon, for you will always have plenty of them at the time of the year when chickens are not laying.

There is another feature about the Indian Runner egg that makes it very valuable; nothing excels them when it comes to cooking. They are far richer than any chicken egg ever dared to be, and make the most delicious pies and cakes rich and nutritious. In cooking, four duck eggs will go as far as six chicken eggs, as they are one-third larger. Their yolks are as light a yellow as any chicken egg ever laid. I have never had a duck egg broken on my place that had a red or even dark yellow yolk. I make all kinds of cake with them. I use them in all my candy receipts, making of them icing for cakes, divinity fudge, French nougat, marshmallow frappe. I use them in corn bread, in making pies, bread pudding and other puddings, meringue for pies and puddings. In fact any place you can use a chicken egg in cooking a Runner egg can be used to better advantage. And when these are used in cooking the most fastidious and the most prejudiced can not tell whether they are Runner eggs or chicken eggs that have been used. A great deal of objection to Runner eggs is prejudice. I had some friends to visit me last fall. They were with me ten days. It was the time of year when I was getting no chicken eggs, so I used my Runner eggs for breakfast every morning. After five days of these eggs for breakfast every morning one of my guests said, "Mrs. Porter, before we leave, you must serve us some duck eggs and let us see how they taste. I am anxious to taste one. I have always heard you could not tell them from chicken eggs, but I can not believe it." Now it seemed down right cruel to tell her, but I did. I told her she had been eating Runner eggs every day. Strange to say, she never ate another egg during the other five days of her visit.

Indian Runner Ducks are through laying by nine o'clock in the morning. The fertility of their eggs run high. They run as high as chicken eggs if given the same attention. They are successfully hatched in an incubator, requiring about twice as much moisture as chicken eggs and a little more airing. They are more easily raised in a brooder or hover than chickens. They learn to eat and drink and to come out of and go into the hover of their own accord in two days time, while it takes from five to ten days to teach these tricks to little chickens. They can safely be taken away from the fire hover in three weeks, while chickens in order to do well, require the fire from six to seven weeks. They do not require a large range, nor a pond of water, though they appreciate both. If kept in pens, they do better without the water to swim in, but if on a large range the pond of water will be all right. They do not require expensive houses, are not hurt by wet yards or rainy weather, for under these conditions a duck is in her element.

They are the most attractive fowl on earth. They are easily raised, being out of danger in three weeks, a chicken is not out for two months. They grow rapidly, are ready for the table in ten to twelve weeks, and no more delicious meat was ever set on a dish. They begin laying at five months of age. They are free from lice and mites, have no combs to get frosted on winter nights, do not have roup, sorehead, cholera, or contagious diseases of chickens. If fed a rich protein food will never get down in their legs or backs. If they roost on dry ground will never have rheumatism. They do not require perches to roost on, they do not require high fences to hold them, a two foot fence being sufficient. They respond readily to scientific breeding, they are layers and payers. Time will fail me if I tell all the good qualities of these birds, for believe me, kind readers, I have only told a few of them. They are all that I have said, and then some.



FIRST PRIZE WHITE ORPINGTON COCKEREL  
GREATER BUFFALO SHOW NOV. 1913.  
BRED AND OWNED BY  
Wm. COOK & SONS SCOTCH PLAINS N.J.



# Old Time Theories as to Egg Production

By MICHAEL K. BOYER, Hammonton, New Jersey



HERE are still many who believe that it is necessary to have a male bird in the pen to induce egg production. If that was so, it would be a sad thing for the large egg farm, where table eggs alone are desired, and where pens are never mated. The cock bird has nothing whatever to do with egg production; his mission alone is to fertilize the eggs that we may reproduce our stock. Another theory is that mated pens lay more eggs than unmated ones. On the farm of the

writer part of the yards are mated and part are not. The eggs from the unmated flocks are used for table purposes, and contain culls from our regular breeding stock, such as birds with bad combs, or wry tails, or some other disqualification. But the blood is the same as our breeding flocks, so that the laying qualities of the one are equal to the other. A carefully kept record, and this record which extends over a period of ten years, shows that the unmated pens have averaged as high as the mated ones. Another: Mated hens are the first to become broody. Last year over half of our unmated birds became broody before one of the mated ones. The year before they were about equal. Back of that we have no record, but it again goes to show that the male has no other influence than to fertilize eggs. Another: That the small, or "pigeon" egg is the last of the litter. Superstitious folks used to say such were unlucky eggs, and should never be brought in the house, but instead thrown over the house chimney. Our records show that two days after laying these small eggs the normal size was resumed. Another: Nest eggs are necessary for egg production. No nest eggs are used on the farm of the writer excepting to place under broody hens to test their broodiness. We cannot recall of ever seeing nest eggs on any of the large farms of the country. Nest eggs may be valuable to teach pullets to lay in certain nests, but certainly they have nothing to do with influencing the pullet or hen to lay. When the egg is ready for delivery the hen is bound to drop it. Another: Allowing the eggs to accumulate in the nest causes increased laying. Why? The theorist claims the hens will lay better if the eggs are not gathered until night. "You may have observed that the nest first occupied in the morning receives the majority of eggs for that day. There seems to be a sort of competition among them to see how many eggs they can get together in one place. If removed several times a day they seem to lose their incentive for doing their work. Think back and you will see that she is only following a natural instinct in not wishing to deposit any more eggs where all others have been destroyed or taken." That is an argument upon which a sermon could be preached. That it is incorrect is testified to by the trap nest men, who gather and record each egg as laid. No eggs are allowed to remain in the nest. Does this removal lessen the number of eggs? That can be answered Yankee fashion by asking

the question: "Was the 200-egg hen ever known before the trap nest was invented?" These theorists should examine the egg records on the farms where trap nests are in operation, and they would be surprised to learn that fifty hens selected for egg production and regularly trapped are turning out two to one more eggs than the same number on farms where the eggs remain in the nests until night. And why that difference? For the reason that the trap nest man each year picks out his best layers and breeds only from them. The good qualities are annually imparted to the new generation. Another old theory is that a severe thunder and lightning storm will kill the unborn chicks in the shell, should that storm come up a week or so before the hatch is due. While living in New England, the writer one day made a trip to the poultrymen of Lowell, Mass., and among the places visited was a poultry plant run by William Nichols. We were told on this visit that one day while Mr. Nichols was in the barn looking

after a number of setting hens, a thunder and lightning storm arose. All of a sudden the lightning struck the edge of the roof of the building, tearing out a big piece, and then, traveling to the front, ripped off a board. All this happened while rolls of thunder fairly shook the building. The next day the neighbors, becoming acquainted with the facts, assured Mr. Nichols that the eggs under those hens would not hatch; that such a storm invariably killed all life within the egg under incubation. Nevertheless Mr. Nichols did not break up the hens or throw away the eggs. He was anxious to see what the results would be. In every case the hen came off with two-thirds of a hatch. Another: That eggs for hatching must never cross the water. This fact was so set upon the minds of many breeders that they refused to make foreign shipments. Today eggs are sent to all parts of the world and with good results. Another: The egg-laying type of hens. This theory gained some prominence in the poultry press. One breeder said the hen should have a broad, deep, round body of moderate length and not too chunky. Another fixed a type exactly reverse to the former. An-



1st cock, Augusta, Atlanta and Nashville, 1913 and 1914; 1st cockerel Louisville, Ky., 1912, headed "Champion" pen Atlanta, 1912. Of him Judge Owen says: "The best Brown Leghorn I have seen this season (1912) and one of the best I ever handled." Bred and owned by H. T. Boyd, Sweetwater, Tenn., and heading his best cockerel mating.

other, a squarely built, blocky, well proportioned hen, wide on the back, and with legs well apart. This same writer also said that the legs and neck should be of medium length, and the finer the texture of the face the more eggs would be produced. Another said the hen should have a long body and stand well upon her legs.

In this connection H. S. Babcock said that he did not think a "hen with short legs, chunky body and small head" had anything to do with it. He believed that a hen should be of rather light build, indicative of great activity, and of medium, or perhaps rather under medium size for the breed. This egg-type theory kept going the rounds until the trap nest men made experiments, and one contention after another soon dropped. The trap nest proved, while there was no egg type, that, as a rule, the smaller members of a flock were the most steady layers. Nearly all the record breaker hens proved to be rather undersize for their standard. The trap nest also showed that hens with



large combs proved to be better layers than those with small or medium sized combs. In a flock of Leghorns, the best layers had the largest combs. In Wyandottes, single comb birds—they will occasionally throw such—give the most eggs, as a rule. The famous Silberstein Light Brahma hen, which laid 231 eggs in a trap nest, was a large combed bird. Another theory was that white birds are more delicate than colored or parti-colored. How this idea ever originated we are unable to say. It is ridiculous. What more hardy bird than the Light Brahma or the White Leghorn? In fact, we do not know a white breed that is delicate, certainly not those familiar to American breeders. Another: Lice cause gapes. The theory advanced was that the lice on the head of the chick finally crept in the nostrils and then down the throat, causing the bird to strangle. On this gape question we believe there have been more theories than on any disease to which fowldom seems heir. Angle worms, climate, disease germs, etc., were attributed as causes. These theories have been knocked in the head by the fact that in such sections of the country like South Jersey, where the soil is sandy, and where all filth is washed in the soil and filters through with each rain, cases of gapes were never known. This proves that the heavy soil is easily polluted, and that this filth to a certain extent is the cause.

The late census shows us that the American hen gives us 16,000,000,000 eggs a year these days. The census shows us there are over 200,000,000,000 laying hens in the United States, and this is not to be taken as a high estimate, as the lowest number in a census given is the rule where hens and eggs are concerned. The value of the hens the United States over is estimated at \$70,000,000. All other fowls bring the value up to over \$85,000,000. If divided this would give every person in the United States \$1.12, and the eggs, if divided right, would allow every person, child or grown-up, 203 eggs a year for their own eating. The weight of the eggs laid in a year annually tip the scales at 970,363 tons.

A. G. Gilbert, poultry manager of the General Experiment Station at Ottawa, Canada, says a durable and lasting whitewash may be made as follows: Put into a water-tight, clean barrel half a bushel of unslaked lime. Slake the lime by pouring sufficient hot water into the barrel to cover the lime to a depth of five inches. Stir briskly until slaked. Add two pounds of sulphate of zinc and two pounds of salt dissolved in hot water. These ingredients will prevent the wash from cracking or peeling off. It is better to apply the whitewash while hot. If to be used

for inside of poultry house, colony houses or coops, add half an ounce of carbolic acid. To color the whitewash, add yellow ochre, venetian red or any other desired color.

Professor James E. Rice says shutting hens in small and poorly ventilated houses and in small yards always lowers vitality which will be shown in the chickens of the next year. The hen that has wide range and secures part of her own food is a business hen. She can stand the strain of laying an egg every day for greater part of the year and she can transmit vigor to her chickens. Our experience in using closed houses and small yards lessened the egg production, fertility of eggs, and vigor to her chickens.

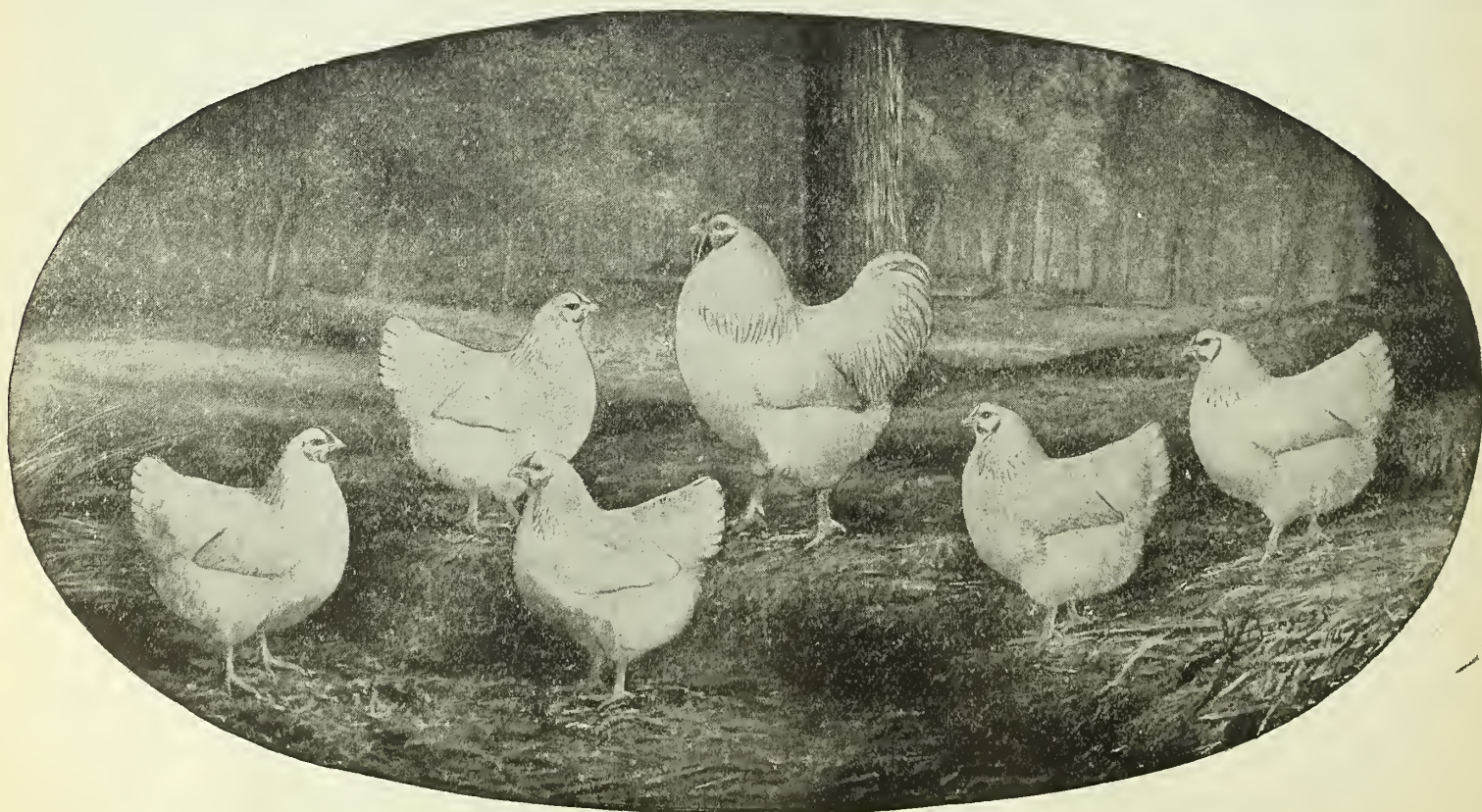
The Long Island duck raisers scald their market ducks, removing all the feathers but those on the head, part of the neck, the flights and tail feathers. Boston prefers them dry picked, with tail feathers removed and pin feathers shaved.

The proper way to check the progress of liver disease is to change the food. The fowls first are afflicted with indigestion, and this not being treated, the trouble advances to some liver complaint. All food of stimulating nature must be dropped from the bill of fare.

Strictly first-class market stock is well fattened, the breast bone does not stick out like the keel of a boat, the meat is yellow in color, the carcass well dressed, cleanly picked and not roughed all up nor torn. It is also clean of pin feathers, and no dirt is found on the legs and feet.

"Bagging down behind" is usually caused by the retention of eggs in the oviduct, followed by inflammation and tumor. When hens get too fat, eggs are often broken in the passage, and cause the same disorder. The tumors sometimes grow to enormous size, weighing the hen down. The presence of a male bird, when a hen is in such a condition, will aggravate the trouble.

Buy stock from good laying strains, if eggs are mostly wanted. Select stock for broilers from flocks that have plump breasts and broad backs. Such birds will "score" 100 in market poultry, and yet probably be disqualified for the show room. While it is important to keep poultry within the line of thoroughbred, there is no particular value in scores for market poultry. It is almost next to impossible to have show records and first-class utility qualities in the same stock.



A pen of Exhibition Birds. Bred and owned by J. C. Fishel & Son, Hope, Ind.



# The Faverolles Are Gaining in Popularity

From the London Telegraph



UCH has lately been written of the merits of French and Continental breeds for flesh and egg production, and their growing popularity in this country, whilst at the recent classic poultry shows sign of their popularity has been manifest. In 1896 a massive, shapely, handsome breed, known as the Faverolle, was introduced from France, with a character for rapid flesh-growing and a reputation for special winter-laying qualities, but it was slow to attract attention for

many years. However, it now occupies a most prominent position amongst modern breeds, and bids fair to increase, both as desirable poultry for utility and exhibition circles. Bred in salmon, black, also white varieties, they are decidedly attractive, especially when pure and of good type, which of recent years is more fixed. The white variety is decidedly pretty, and lends itself to the fancier's skill.

The classes at the Dairy, Palace, Birmingham, and Wolverhampton shows were filled and attracted admiration. Experienced breeders report that the white Faverolle is equal in hardiness and prolificacy to the salmon, and breeds equally true to the standard of excellence, whilst there is no reason to doubt the breed's claim to beauty. A consideration of the breeds utilized in building up the French Faverolle reveals the pleasing fact that the old-fashioned English Dorking was responsible for its splendid square shape, plump, round breast (also the five toes), whilst the prolific Houdan (the table fowl of the district) being utilized, could not fail to improve shape, depth, and laying properties. The Brahma and Cochins enhanced the Faverolle's hardiness and accounts for the feathered shanks seen on the breed. The beard and muffling are peculiar to many French fowls, and when bred to perfection in this country for exhibition are decidedly attractive. On many poultry farms in exposed districts they have proved to be excellent winter layers, and when wanted for the market make excellent table birds. Owing to the fact that as flesh producers they attain a good size very quickly, splendid results have been obtained from a Sussex cross, and those who contemplate breeding operations in the New Year will do well to give the Sussex-Faverolle a trial. A steady, continued increase in all varieties of Faverolles is confidently predicted as long as the Specialist Club, which protects the breed's interests, demands a thick, deep, broad body, square like the Dorking, breast broad and prominent, back square, flat and very broad across the shoulders, with thighs short and wide apart. The hen's body is longer and deeper than the cock. The standard size is 7 pounds to 9 pounds cocks, and 6 pounds to 7 pounds hens.

**Mating Up**—Here it is greatest care has to be exercised. The progressive, aspiring fancier studies all the points and details of his birds, and endeavors by careful mating, to remedy any defects his birds may have suffered from last season, and generally to improve his stock. It is primarily important to note that, whilst we look to the male bird to supply the color, style, and the head points, it is the hen on which breeders depend to increase the size and

shape, although even in this matter the strain has much to do with the actual result. Successful breeders do not always select the finest exhibition birds to head their best breeding pens, but depend largely upon the parentage. Those who look for eggs only will mate up birds whose record as layers (on both sides of the union) will bear strict investigation, for, whilst certain breeds of poultry are better layers than others, it is the strain or pedigree that must be relied on to breed birds that will fill the egg basket. Reference has been made to the importance of having age on one side of the union rather than mating up cockerels with pullets, which generally results in disappointing hatches. Also that during the winter months only two or three hens should be given the male bird, who must always be kept in a vigorous state of health. He should be removed from the pen for a short while daily, and specially fed with good invigorating food containing plenty of lean meat, for in his anxiety for the welfare of

his mates or wives he often fares badly himself, and it follows that if the "lord of the harem" is in poor condition unfertile eggs will result.

Unless required for the early summer shows it is advised that hatching operations should not begin yet, as it is far better for all the heavy Asiatic or setting breeds of poultry to be hatched about March, whilst the smaller Mediterranean, or non-setters, will succeed best, if hatched in April and May, the reason being that when chickens are hatched in the earlier months they mature late in the summer, start laying for a few weeks, when they fall into moult, and seldom lay again until next spring. Our fowls should be hatched to mature in autumn and to lay about October, continuing throughout the winter, when eggs are remunerative and if poultry breeders would pay attention to this advice, they would find it greatly to their advantage. The importance of this point is emphasized by a communication to hand from a Kentish farmer, who has been obtaining since autumn 2s 6d per doz. wholesale for new-laid eggs in Leadenhall Market.



Prize winning Partridge Rock. Bred and owned by C. J. Lloyd & Son, Greensburg, Ind.

**Old versus New Breeds.**—A correspondent, whilst paying a tribute to these weekly notes, considers that poultry-breeders in their eagerness to advance the laying powers of the hen, and by creating so many new varieties, have ignored the old breeds of poultry, such as the Brahmas, Cochins, and Dorking, which bid fair ere long to be quite eclipsed by the Orpington and Wyandotte and Rhode Island Red breeds. It cannot be denied that the latter are daily increasing in popularity with town and country poultry-keepers, utility and exhibition, but the reason should be apparent to all, for whilst lovers of feathered beauty cannot fail to admire the massive size and lovely feather of our older breeds, except for the show arena they are not always associated with profit, and the ultimate success of a breed depends upon its utility properties, which, when combined with beauty, deserves (and generally obtains) every support.

Such breeds as the Orpington and Wyandotte have been created by utilizing the blood of the Brahma, Cochins and Dorking, and all credit must be given to breeders for their commendable energies which have so materially assisted the poultry industry of Great Britain. Some may attempt to argue that these men have spoilt many of the



utility qualities of poultry, but it must be remembered that fancy or distinct breeds always have the decided advantage that when crossed their productiveness and vitality return with increased force, and therefore even the utility poultry keeper has to be thankful to pure or fancy breeds for the benefits he receives in this way. Pure-bred fowls from a reliable strain (and to be successful in poultry culture every importance must be attached to strain) are the most useful and invariably remunerative, and when judiciously crossed give excellent results, whilst the common barndoor fowl, whose pedigree invariably defies investigation, never proves a satisfactory investment. However, much benefit is obtained by utilizing each year the services of pure-bred or pedigree males of known laying strains where egg production is the desideratum, whilst for increasing the size and table properties neither the Brahma, Cochin, nor Dorking is ignored, and if a wise consideration is given to age (no fowl being profitable after its third season) even mediocre flocks can be improved at a small cost.

The writer is reminded of this fact by a communication from a correspondent, who, acting on his advice, purchased half a dozen pure-bred massive Buff Orpington cocks, from trap-nested, record-laying strains, to distribute on his estate, with the result that the birds raised already show a marked improvement in vigor, size, and type, also eggs, and there seems every prospect of a good winter's work being reported in the poultry section, which had unfortunately been neglected. The cockerels available for killing have been of splendid size and good quality flesh.

An educational standard is sadly needed for general distribution in Great Britain, with information as to the salesmen's requirement, and instruction as to general feeding, so as to obtain the best results at a minimum cost, and the shortest possible period. The table poultry standard issued should be simple, plain, practical and precise, so that farmers' sons and daughters may be educated as to the requirements. The Table Poultry Club have a grand field for labor, and, if properly supported, should vastly improve the flesh production of poultry in all counties, whilst it is hoped that with State assistance a series of growing tests may be arranged.

The judges at our various shows should have a definite standard to recognize when making awards, and the sooner arrangements are made in this direction the better. Great Britain has the land, also the breeds, food, and appliances for improving this important branch of the industry, which is both profitable and pleasurable. Already in some districts reports are made of thousands of chickens hatched and doing well, many of which at four weeks weigh 9 oz. cockerels and 7 oz. pullets, which is doubtless due to favorable weather, in addition to proper feeding. In order to encourage chicken rearing on practical lines, an interesting competition is running in "Feathered Life." Prizes are offered for the most practical article on "How to rear fifty chickens per week at a profit of 1s per bird on an acre of ground."

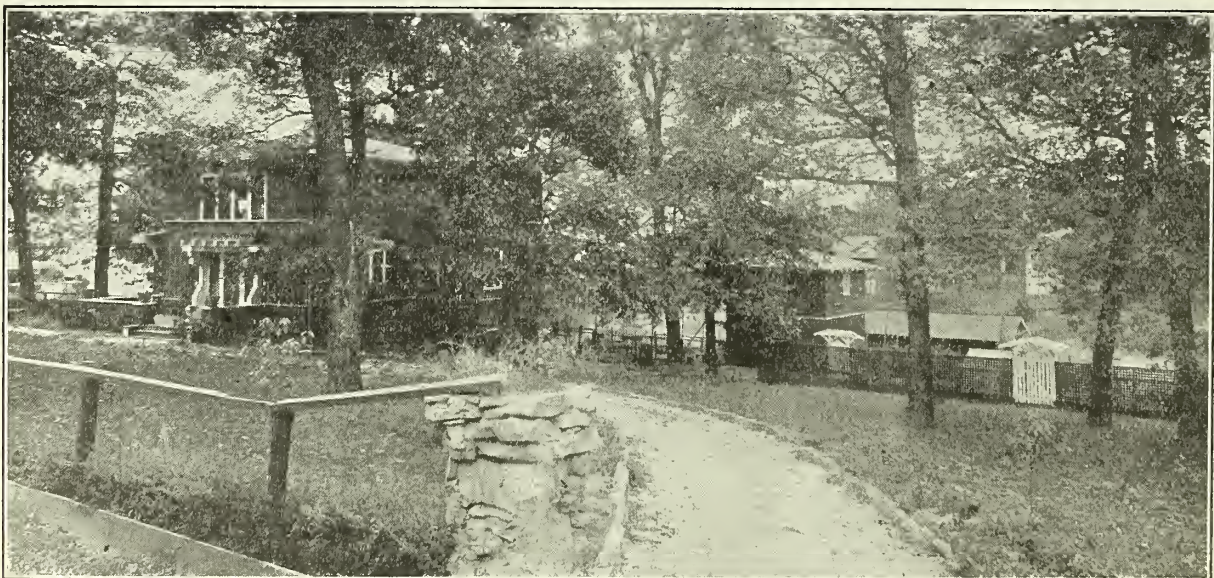
Every possible publicity should now be given to table poultry culture, so as to increase the output. The present period is convenient for making a start in growing flesh, and it cannot be too widely known that the first six months of the year is the best for successfully carrying on the work. Already progressive breeders have pens carefully mated up for supplying fertile eggs for setting, and whilst the spring time is certainly the best for hatching egg producers, it is recognized that it is the spring chicken which is ready for the table at Easter that proves the most remunerative. With the aid of reliable incubators and foster mothers there is no excuse for delay in such matters.

### PROFITABLE POULTRY FARMING

From the many letters continually being received from correspondents contemplating poultry-farming it would appear that from a £100 investment and a few weeks experience a comfortable income is confidently anticipated. On consideration, the absurdity of this idea is very apparent, for even men who have expended years of honest toil, and have a life experience, can only with difficulty and by dint of careful economy make ends meet. Profitable poultry-farming is an industry suited to the man of business capacity who is contented to lead a country life, but he must—as in all other lines of business—gain the needful experience, and be able to treat 1,000 head of poultry on extensive pastures as successfully as he did a dozen in the rear of his domicile.

It is the man of humble beginnings who year after year has studied the various breeds of poultry; and understands how to mate, rear, and feed, who is able to obtain the best results, and can venture to start poultry-farming, which to a young beginner is beset with many pitfalls and difficulties. It is admitted that a short time spent on a progressive utility poultry farm will materially assist the aspiring breeder to obtain an insight into the industry, but it is when poultry-farming is carried on in connection with market gardening, fruit, sheep, or dairy farming, or any country business, that a satisfactory balance-sheet is obtained. If, however, all the expenses of land and labor have to be debited to poultry a serious loss generally results. The man who on the land attached to his house specializes in one or two profitable breeds, and keeps a small flock of, say, fifty well-selected hens—whose age and strain have been carefully considered year after year—can reasonably look for profit, varying from 6s to 7s per bird per year.

If attention is given to breeding a few typical birds for the show-pen this amount may be considerably increased by selling at remunerative prices settings of eggs and day-old chickens, but the poultry-farmer with thousands of fowls, demanding many acres of pasture and incessant attention, has to face an entirely different problem.



Home of O. B. Andrews, Lookout Mountain, Tenn., originator and breeder of the famous Efficiency Strain Barred Plymouth Rocks and S. C. White Leghorns.



# The Feeding of Chicks for Best Growth

By J. C. CLIPP, Saltillo, Indiana



THE WRITER has 101 letters from all over the country asking various questions on "How to Feed Chicks for Best Growth" and "How to Break Up Broody Hens." Well, both these questions are very timely, I presume, just now, and I will briefly dispose of both subjects in this one article as there will be hundreds of chicks hatched and hundreds of hen becoming broody long before this issue reaches its readers. There have been pages after pages written on how to feed and grow

chicks. There seems to be as many different ways to feed chicks as there are feeders or writers. But there is one thing all experienced breeders readily agree on and that is, young chicks' greatest danger is from the day they are hatched up to the time they begin feathering. At this epoch chicks in majority of instances are fed to death. It's not so much how to feed, but how much to feed. It's not so much what to feed, but in what amounts to feed, what ever you have, presuming we all have good wholesome foods of some kind. In my experience I find that death comes from over-feeding more frequently than does under-feeding or not feeding the proper food. The greatest danger comes to the brooder chicks that do not have natural or sufficient exercise. That is why I like the natural hen method of brooding chicks over the artificial methods. Nevertheless, thousands of chicks are raised to maturity every year with the artificial method of brooding, and while this is true, on the other hand thousands of chicks are fed to death that are brooded in artificial brooders. There are vastly more chicks brought up to maturity with the natural hen brooding than with the artificial method of brooding. The reason is obvious, simply because the chicks can

not get proper exercise, and for that reason and due to the fact that the majority of growers invariably feed too much. I know it is the hardest thing in the world to overcome, yet we all have a weakness more or less to want to satisfy the chicks and give them all they want and when we do this we simply kill them almost as fast as we hatch them out. I find, too, that it is more easy to over-feed any kind of brooding chicks with mash foods than with small or whole grain. But, strange as it may seem, the more we feed of the proper mashes the better the chicks will grow. Quite a contradiction in statements. Yes; but it's true the more we feed of mash foods the better the chicks will grow and the larger they will de-

velop, yet at same time it is easier to over-feed with mash foods than with small grains. If we would watch and observe just what amount the chicks would eat up, say within five minutes time and only feed that much every time and feed often on the very best mash foods possible, with only an occasional feed of wheat, you would soon find that your chicks would grow faster and make much larger specimens. But the trouble comes in like this, when we are managing and feeding chicks the majority of growers have a multitude of other matters on hand and hurriedly feed the chicks a great "dope" of stuff and never take time to see if they eat it all up or if they leave a very great amount to become stale to be consumed by the chicks later, only to cause bowel trouble and death. That is the only reason we do not recommend mash foods for the average poultryman. For the specialist, who gives all his time to the business, who sees that his chicks will eat "just so" and no more, will make a great success feeding soft or mash foods.

You will hear the majority of growers say that soft foods cause indigestion and it will and the reason is, because you feed too much; if you only feed just what they will clean up in a very short time, leaving the chicks just a little hungry, you would never have bowel trouble by feeding mash foods. I have tested the feeding question I think thoroughly, and I am confident the whole troubles come from over-feeding the soft foods. I have used the two methods of feeding along side by side and I find that the soft food will cause bowel trouble very quickly if it is fed too freely, but if it is not fed too freely and in proper amounts we could get better results than with the whole grain, but for busy people who have not the time to carefully feed the chicks, such people will find the best results come from feeding small grains. Now the question comes, "How to Break Up Broody Hens," which carries with it a two-fold problem. We want to



Third pullet-bred cock, Indianapolis, February 2-7, 1914, never been retouched. Bred and owned by C. E. Spaugh, Rugby, Indiana.

break the hens from broody habits and at the same time get them back to laying again as soon as possible. If we only wanted to break them of the broody habit, the proposition would be an easy matter, but we must get them to laying quickly and to do this at the same time we break them from becoming broody, appears to be a problem with some. Well, a broody hen is always fat and I find to quickly break her from the broody habit all at the same time, is to feed her abundantly on easily digestible food, rich in protein and mineral matter. Place her in the cockerel pen where there are a few very vigorous cockerels and in a very short time you will have her entirely over



the broody habit. The Buff Plymouth Rocks, you know, are claimed by some to be the hardest fowl on earth to break of the broody habit. It may be true, however, they are great layers, or they would not be great brooders, but just as sure as one of our birds become broody we take her into custody and feed her on soft green food, wheat and

oats, place her in a pen where there are two or three vigorous cockerels and within four days time at the most, I have her ready to sing and willing to take the laying habit again. You can break the broody habit on any hen with this method. It's absurd to treat broody hens cruel, as many do.

# An Ideal Poultry House and Its Construction

By FRANK W. BIDDLE, R. F. D. 4, Knoxville, Tennessee



IN RESPONSE to a request from the editor for a description of our poultry house, I herewith submit a photograph of the plant. When building a poultry house several important things must be considered. The location is very important; a Southern exposure is the best. Then convenience and comfort of the fowls must be considered. This poultry house we believe is as perfect as any to be found in the United States. The size is 15 feet

wide by 100 feet long. A hallway 4 feet wide runs the entire length of building. The feed

hoppers are near the floor; a four-inch space opens for the chickens to get their heads through but not their bodies. A door 1 inch x 10x8 feet is raised to put feed in hopper. The same principle applies to the nest boxes, which are directly under the drop boards. A door 1 inch by 8 in. x 8 feet on hinges is raised to gather eggs. The hens enter from their side. A door also allows drop boards to be cleaned from the hallway; in fact all work is done from the hallway. The plumbing in this house was a considerable item. There are 12 apartments and there is fresh water dripping in each pen all the time. The galvanized pans set in a cement base so they can be lifted out and cleaned easily. As

there is always a certain amount of night work around a chicken house, we had a pipe run from our acetylene lighting plant and find it a great convenience to just pull a rod and have a flood of light to work by. I once heard of a man who had his chicken house lighted with acetylene gas and the light was so brilliant that the hens thought it was daylight and laid again. Now I do not vouch for the truth of that story. But in all seriousness, while the interior conveniences cost a trifle more they certainly do add to the comfort and health of the flock as well as labor-saving for the attendant. With plenty of bins in the hallway for grain, bran, corn meal, alfalfa meal, charcoal, grit and oyster shell, it is an easy matter to give the chickens a variety and change which keeps them in the best of health and fills the egg basket. So much for the interior. As you can see from the cut, the windows of the top are just right for the sun to hit the drop boards. The entire front is closed in by about 2 feet of boards at the bottom and 4 feet of ½-inch galvanized wire square mesh. This permits the sunshine and fresh air to dry the litter so that there is no dampness. We haven't had a frozen comb or any bad colds or roup this year. The runs are 10 feet by 50 feet and are planted in plum and peach trees. The house was built good and strong and then the entire surface was covered with stamped tin. We then painted it brick color and penciled, which gives it the appearance of a brick house. While this made it cost more, it certainly does add to its beauty and also to the warmth. We have used this house for about 2 years and like the plan so well that if we had to build again we would build exactly like it. We hear so much nowadays about open-air bed rooms, why not open air poultry houses for creatures

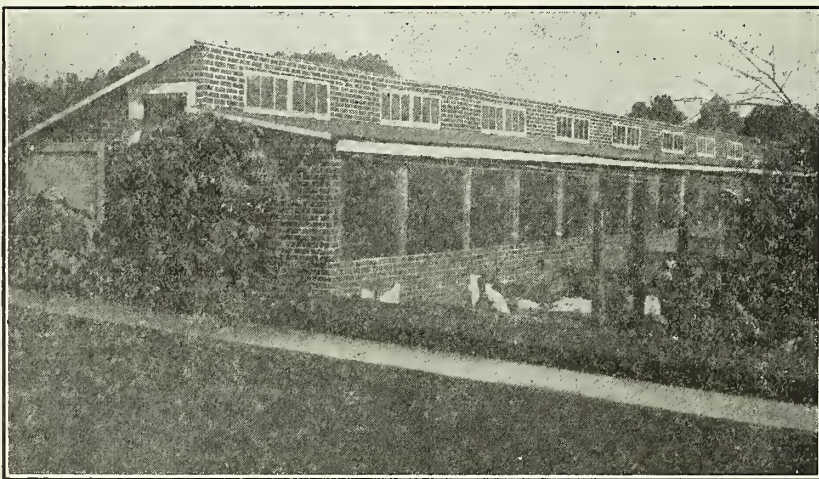
that God has provided with such beautiful coats of feathers for their protection? How would you like to be shut up in a foul, stagnant, poorly ventilated poultry house? As it is a great help to any one just going into the poultry business to actually see a poultry plant in operation, we would be more than glad to show visitors through and give them any suggestion toward constructing or planning their houses. What we want to do is to encourage thoroughbred poultry, and cooperation among poultrymen is one of the best ways to do this. There is no better section of country for poultry than East Tennessee. Let's all work to improve our breeds and house them better and the egg basket will be full.

## The White Leghorn—Why?

I am often asked why I breed White Leghorns—I always reply, it is because they pay me. It is generally conceded that egg production is the most profitable side of the poultry business. Now I will admit that any breed will lay if we have a laying strain, for there is certainly more in the strain than the breed, still the laying strain of White Leghorns holds a unique position in egg production, and hence are very profitable. I mean this—they begin to lay from five to eight weeks earlier than the heavier breeds and this gives you eggs in the fall when eggs are going up, and many

of them will pay for their winter's feed before the pullets from the larger breeds commence to lay. A strong point in their favor, as eggs get high in the fall and early winter. Again, they are smaller, so require less house room and quite a saving in equipment. They eat less than heavier breeds—a most important item as regards profits. They stand confinement well, so can be confined to their houses for winter egg production, yet when given their liberty they are great "rustlers" and will find much of their feed. Although a small breed they lay a large egg, and also a white egg and white eggs on some markets bring a premium. They are non-setters, thus saving the trouble of breaking up the broody hens. But still more important they can be bred up to a high egg yield. It is easy to realize profits from hens that can be bred up to such high records. The laying contests have already shown to what high egg yields the Leghorns can be bred. But still one of their most important points is the high fertility and hatchability of their eggs. I have found White Leghorns to hatch better than any breed I have ever raised. Even in the coldest weather their eggs are extremely fertile. Today I wanted to set some and to be certain I broke quite a number—nearly two dozen—and did not find an egg that was not fertile. In other words, when we sum up their good points we must conclude the White Leghorn occupies a unique position, all her own, when it comes to profitable egg production.—Sidney Johnson, Boydton, Va., in Poultry Item.

Pullets that are not properly grown, or in some way have received a setback while growing, will be correspondingly slow in starting to lay.





# Feeding and Brooding of Incubator Chicks

By F. W. KAZMEIER, Poultry Department, Cornell University



LEAVE the chicks in the incubator until they are 48 hours old. During this time see to it that they do not pant for lack of fresh air. We have found it a good idea to prevent this, and also get them accustomed to the outside air by opening the incubator door about the width of a match. Darken the incubator door, if of glass, by tacking dark paper or cloth over the same at hatching time, and the short time they are to remain in the machine after they are hatched. During

this time they need absolutely nothing but fresh air, warmth and sleep. Warm up your brooder, clean and thoroughly disinfect it several days before the chicks are to be placed in it. Make sure the floor is tight, so no cold currents of air can come in that way. Under the

hover we want a temperature of about 95 to 98 degrees, and in cold weather a temperature of 100 degrees is not too high. For litter we prefer cut straw, in 3- to 4-inch lengths, free from mustiness. For small chicks up to one week old, we like to have about one inch of litter on the floor, the second week about two inches, the third week about four inches, and thereafter at least six inches or more, especially if they are confined. We now have the chicks in the brooders properly warmed, and the next factor that confronts us is the question of when and what to feed. We do not feed any of our chicks until they are at least 48 hours old. Nature has provided for the first few days for them, so all that is necessary for us to do is to see to it that they have warmth, fresh air and sleep. The first food they get is grit, charcoal and water in separate dishes. These are kept before them at all times. The water is given in such a manner that they cannot get into it, thus getting themselves wet. A few hours later they get their first feed of mixture No. 1, moistened with sour skim-milk and fed five times a day, every two hours, in low rim tin plates. We keep mixture No. 2 in shallow trays containing a little of No. 3 (dry) always before chicks, for the first five days. For the first five days mixture No. 1, moistened with sour skim-milk is fed five times a day.

Mixture No. 1.—8 pounds rolled oats, 8 pounds bread crumbs, 2 pounds sifted beef scrap, 1 pound bonemeal.

Mixture No. 2.—3 pounds wheat cracked, 2 pounds cracked corn (fine), 1 pound pinhead oatmeal.

Mixture No. 3.—3 pounds wheat bran, 3 pounds corn meal, 3 pounds wheat middlings, 3 pounds beef scrap (sifted), 1 pound bonemeal.

Mixture No. 4.—3 pounds wheat (whole), 2 pounds cracked corn, 1 pound hulled oats.

When the chicks are five days old and up to the age of two weeks we feed mixture No. 2 in light litter twice a day, No. 3 moistened with sour skimmed milk, fed three times a day and No. 3 (dry) always available. Between the ages of two to four weeks we feed the same as above, except that the moist mash is given only twice a day. When the chicks are four weeks old and up to the time they can go on free range, we reduce meals of moist mash to one a day; mixture 3 and 4 in litter twice a day, and dry mash always available. The above is the "Cornell Chick Feeding Ration." In feeding small chicks we believe in keeping them hungry and guessing the entire day, the only time for them to really fill up is the last thing at night. We do, however, like to have them eat all they want at this time, unless in exceptional cases, when they show to be abnormally hungry, when we sometimes consider it advisable to

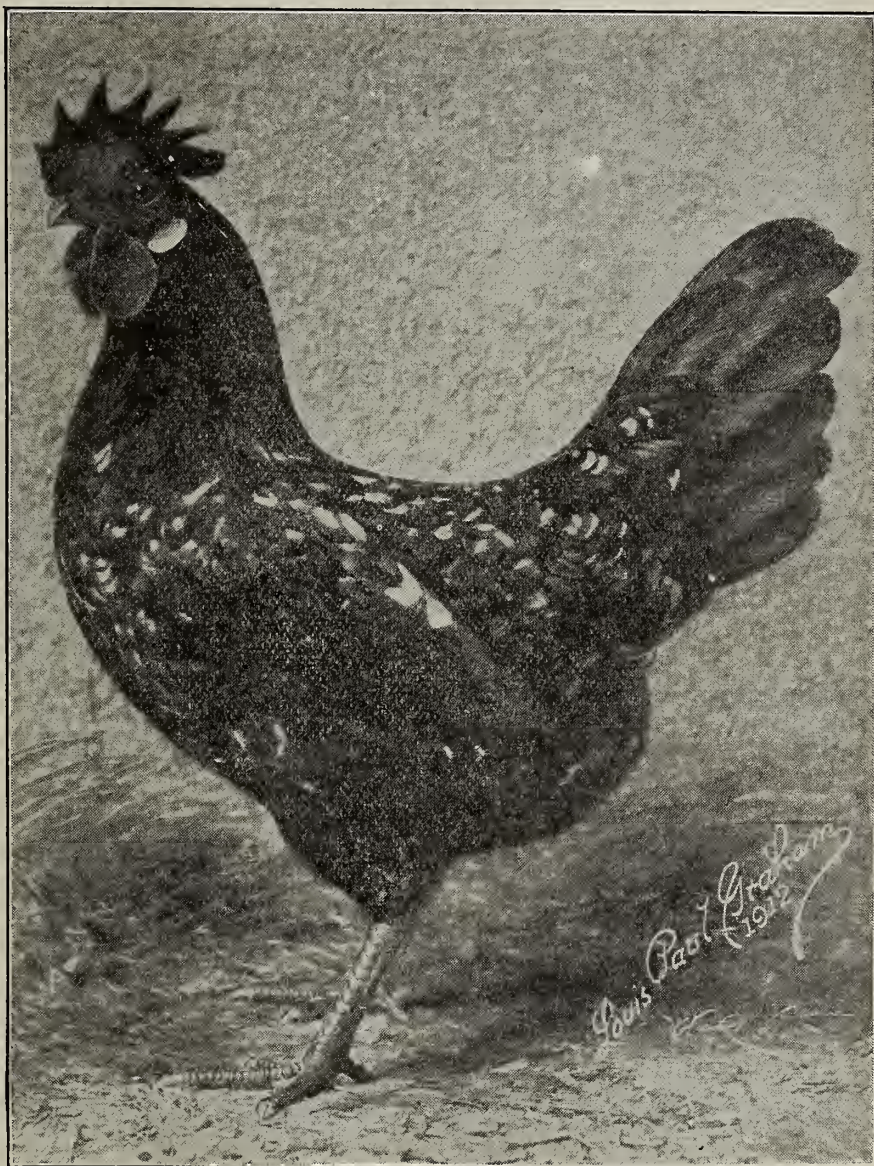
consider it advisable to feed them a limited amount at this meal also. But this is the exception rather than the rule.

Feed a little green food, in limited quantities from the start. We like sprouted oats, cut up fine, cabbage and a little onions sliced up into very fine slices, of course green grass is the best of all when it can be had. As soon as possible allow the chicks to run outdoors for fresh air, exercise and possibly green food. We clean the hover daily, and the houses, as a rule, twice a week. The more the brooders are crowded the oftener they have to be cleaned. We disinfect after each cleaning and use nothing but dry litter free from mold. All feed is tested before feeding; in fact feed nothing but wholesome food, that we would not for a minute hesitate eating ourself.

## A Problem in Roosters

A good rooster—one who retires regularly in the evening, and knows how to behave himself handsomely in the daytime—is more to be desired than much fine gold, and nearly as rare. Nothing is harder to find—when you really want him—than a good rooster with an even temperament, unflustered at trifles, who practices his morning crow at precisely the same moment every day, and who spends his time looking up choice morsels of nourishment for the ladies of his household.

But why is it that when you have purchased with good money an eighty dollar, forty-hen-power incubator that runs night and day with hot air, and have placed therein all the eggs it will hold—why is it that when those eggs are hatched, nine-tenths of them will be roosters?—Life.



Ancona Pullet winner at Madison Square Garden. Owned by H. E. Portrum, Rogersville, Tennessee.



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Owners: S. B. Newman, Knoxville, Tenn.; L. B. Audigier, Rome, Italy; J. W. Crudgington, Knoxville, Tenn.; S. B. Newman, Jr., Knoxville, Tenn.; Gray Newman, Knoxville, Tenn.; W. T. Hayes, Knoxville, Tenn.

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(Signed): EDW. M. GRAHAM,  
Business Manager.

Sworn to and subscribed before me this the 10th day of April, 1914.

J. W. CRUDGINGTON,  
Notary Public, Knox County, Tenn.

## East Tennessee Poultry Association

Quite a number of favorable comments regarding the re-organization of the East Tennessee Poultry Association have appeared in the recent issues of The Industrious Hen, and many suggestions have been made for a winter poultry show. We believe that the time is at hand when a meeting should be called for the poultrymen of East Tennessee to come together and further discuss ways and means for the re-organization and for the advancement of the poultry interest in East Tennessee. Such a meeting should be called at once, if plans are to be formulated for a winter show the coming season. It occurs to us that during the Farmers' Convention to be held here the middle of May (when reduced rates can be obtained on the railroads) would be a good time to secure a fair attendance at the poultrymen's meeting. The time has arrived for further action. Brethren, what will you do?

Wytheville, Va., P. O. Box 14, March 27, 1914

Will you suffer a word relative to the East Tennessee poultry possibilities? Judge Owen is doing some good preaching; the writer has been listening; he must now be allowed to say "amen." Yes, by all manner of means, let us have a great E. T. P. A. There is no section of the country surpassing East Tennessee for the poultry industry. The possibilities for a great poultry center at Knoxville are realized by a few enterprising poultrymen. However it may be accomplished only by Knoxville standing

boldly in the breach, taking the lead, which she is no doubt doing. She must show her faith by her works. Then will not all the contiguous territory fall in line? Though your humble servant is some distance removed, he stands ready to follow; and you may look when the exhibit is on for Vitality Black Langshans to be in their alley.

JAMES R. BROWN.

Editor Industrious Hen:

I note in your March issue responses from several breeders regarding the East Tennessee Poultry Association, and I have also received several personal letters regarding same. The outlook seems very favorable indeed for the reorganization of this Association. It now only remains for some of the Knoxville breeders to take hold. In fact, it all depends upon whether or not Knoxville wants the winter shows again. My object in asking for an expression was to see how the East Tennessee breeders generally looked upon the matter. From all indications I think the association if reorganized would receive good support from all over East Tennessee. I would suggest that the breeders of Knoxville and vicinity issue a call for a meeting to discuss the reorganization of the E. T. P. A. for the purpose of conducting a winter show, and they can go over the ground and decide whether or not they think it advisable to hold a show. In the meantime I would ask that every breeder in East Tennessee who feels interested in the matter of holding a winter show annually at Knoxville at once write to the Industrious Hen so expressing their views, etc. The business has grown so in the past few years that the Knoxville show would be twice as large as it was in former years. We ought to be able to get together at Knoxville 3000 to 4000 birds for a winter show, and if properly worked, it can be done. Poultry clubs are now being formed all over East Tennessee. Most every county has one, and these would all be an aid to the larger or central organization. Let us hear from every breeder in East Tennessee in the next issue of The Hen, also would be pleased to hear from the Knoxville breeders through The Industrious Hen.

Very truly,

D. M. OWEN.

## Make a Noise

A hen is not supposed to have common sense or tact,  
Yet every time she lays an egg, she cackles forth the fact.  
A rooster hasn't got a lot of intellect to show,  
But none the less, most good roosters have enough common sense to crow.

The mule, the most despised of beasts, has a persistent way

Of letting people know he's around by his insistent bray.  
The busy bees they buzz, bulls bellow and cows moo,  
And watchdogs bark, the ganders quack, and doves and pigeons coo.

But man, the greatest masterpiece that Nature could devise,

Will often stop and hesitate before he'll advertise.

—Exchange.

Stevenson, Ala., March 28th, 1914.

The Industrious Hen Co., Knoxville, Tenn.

Gentlemen: Business this late winter and spring has been far beyond our expectation, as the Industrious Hen has done her part in spreading the news, and Dixie Poultry Yards have delivered the goods. So spreading the news and delivering the goods is what it takes to do business.

We have sold and booked all orders, both for stock and eggs of our Leghorns that we can possibly handle this season. We thought beyond a doubt that we were ready for all the business we could get, and especially in Leghorns, but we are unable to fill any more orders for Leghorns this season. Will put forth every effort to raise enough to supply the demand next year. Will accept a few more orders for Reds, either eggs or stock. Thanking you for past favors, I remain,

Yours truly,

L. P. HUDDLESTON, Mgr.



# "BLUE-BAR" CATALOG

My handsome new illustrated catalog is yours for the asking. You are welcome to it whether you wish to buy or not. Just drop me a card, that's all.

Blue-Bar Barred Rock eggs for hatching \$2 to \$10 per setting. Incubator eggs \$8 per hundred. A fine trio, \$10.00.

L. H. READE -:- (Highland Park) -:- RICHMOND, VIRGINIA



## For Executive Committeeman

St. Louis, March 8th, 1914.

Industrious Hen, Knoxville, Tenn.:

Gentlemen:—I will be a candidate for member of the Executive Committee of the American Poultry Association. Modesty forbids mentioning my qualifications, but on account of the big work done, and being done, by the State of Missouri, the biggest poultry state in the union, the state spends more money for the development of poultry culture than any other state, Missouri should be represented on the Executive Committee of the American Poultry Association. My name is the only one from Missouri that is mentioned for any office, and I will be glad to receive the support of all members. Very respectfully,

HENRY STEINMESCH.

## Secretary Campbell's Candidacy

The result of the nominating ballot of the A. P. A. shows that Secretary S. T. Campbell, of Mansfield, Ohio, received 914 votes out of a total of 954 votes cast for Secretary. With all due respect to his nearest opponent, (Mr. M. A. Northrup, of New York, who received a total of 15 votes) we believe it should be in order to make Mr. Campbell's nomination unanimous. Of course parliamentary law forbids this, but his election could be made unanimous. It is safe to say that Secretary Campbell will be re-elected by an increased majority. Secretary Campbell is one of the most valued members of the A. P. A. When he first announced his candidacy several years since, The Industrious Hen gave him a hearty endorsement, and we have never seen the day we regretted our action. He has made good, and under his efficient business administration the membership of the Association has grown to unexpected numbers, and the business of the Secretary's office has been conducted with dispatch and in a courteous manner. We are confident Secretary Campbell's official ad-

ministration will be endorsed in the A. P. A. election on May 4, and that he will be retained as secretary by a large majority.

## Mr. Thornhill Again

We wish to announce that, beginning with our May issue, our old friend, Mr. J. A. Thornhill of New Decatur, Ala., will be again in charge of our Poultry Disease Department. Mr. Shellzok, of Chicago, whom we had secured, informed us that on account of his failing eyesight he would be unable to continue with us. Mr. Thornhill has been on the editorial staff of The Hen from the time she became a baby chick at Madisonville many years ago, and we are glad to have him continue with The Hen as "Poultry Doctor."

## Mr. Campbell Announces

Mansfield, Ohio, March 6, 1914.

Industrious Hen, Knoxville, Tenn.,

Gentlemen:—I am a candidate for re-election to the position of Secretary of the American Poultry Association and will appreciate your support and influence.

For my record refer you to the annual proceedings; growth of the association from 1500 to almost 6000—and the condition of the finances at the time I was first placed in office and the present.

Very truly yours,  
S. T. CAMPBELL.

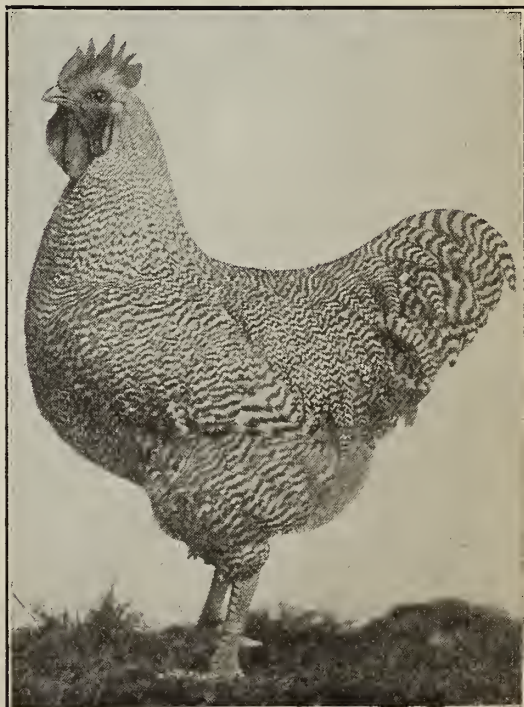
In a neighborhood grocery, where meats are also carried, I saw a woman customer pay 15 cents for two small loin chops of lamb (?) and 14 cents for a one-fourth pound of chipped dried beef (?) and she never said "boo"—but when she had to put up 38 cents for a dozen large, selected strictly fresh eggs, her expression reminded me of the lines in Paradise Lost: "Incensed with indignation Satan stood untterrified, and like a comet burned."—Ped.



Lady Efficiency, prize winning Barred Rock. Bred and owned by O. B. Andrews, Chattanooga, Tenn.



Silver King, famous prize winning White Leghorn male. Bred and owned by O. B. Andrews, Chattanooga, Tenn.



Prince Efficiency, Barred Rock, who won State Championship in New Orleans. Bred and owned by O. B. Andrews, Chattanooga, Tenn.



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## Conkey's Lice Powder

Dusted on sitting hens rids them of lice and keeps chicks free from these disease breeding pests. 10c, 25c, 50c and \$1 pkgs. **The G. E. Conkey Co., Cleveland, O.**

### HATCHING HINTS

If you haven't got an incubator and plan to raise your season's chickens by setting hens, here is a labor and time saving scheme for handling a number of hens with a minimum of trouble and annoyance.

Instead of letting old Biddy steal her nest out in the jimson weeds behind the barn, or putting one in the old barrel, another in the woodshed and others in various odd places about the farm, build a pen of twelve inch boards with no floor and a roof at one side to cover the nests.

The roof should extend clear across one end of your pen and be weather proof. It can be about three feet wide thus giving the necessary privacy and darkness hens like so well.

Divide up the big pen into narrow pens a foot wide and eight feet long.

If you wish to set ten hens at a

time, your big pen will be ten feet one way and eight feet the other.

The small pens should be separated by board partitions a foot high and covered over with inch mesh poultry netting from the edge of the roofed portion to the opposite side.

This affords a safe place for each hen to set and an open run for her and her little family during the first days, after hatching.

Vermen and enemies can not easily get in nor the hens get out. Feed (whole corn) can be thrown in every morning. Fresh water in clean vessels can be given in a few moments. The whole work of looking after ten hens (or many more for that matter) is reduced to a few minutes every day.

After the chicks are a week old, the whole bunch of hens and young can be moved to another labor-saving institution described as follows: In the first place a hen generally can take care of more chicks than she can hatch. It is not a bad idea to double up the chicks after hatching and cut the number of hens in half. This is not difficult if a lot of hens are set at the same time and the chicks smuggled from one hen to another at night while they are quite young.

When you have given each hen all the chicks she can hover transfer them to a good sized yard, say thirty feet square, for a dozen hens and give each hen a single coop. The A coop is easiest to make.

This yard should be well protected by inch mesh netting. The whole lot can be taken care of at one time by feeding and watering. The fence keeps out marauding and predatory cats, dogs, weasels, minks, skunks, and if carefully covered will keep out nearly all the enemies who lay in wait or sail overhead watching for a tender morsel of young chicken for breakfast.

Both of these devices are practical plans in use on several farms known to the writer, where labor and time are too valuable to waste putting at poultry keeping.—Exchange.

The hatching nest cannot be too warm and waterproof for early hatchlings. In an incubator of course we know at a glance whether the machine is doing all right, and can be guided accordingly. But when a hen is used we can hardly determine as nicely when she is producing the required degree of heat. When the place where the nest is situated becomes too cold for the comfort of the hen in her feverish condition, then it is time to move the nest to a more comfortable place if we expect to get any chickens from that hatch.

Don't overlook the dust bath if you want to keep lice in check. Sifted coad ashes make a good dust bath, but only coal ashes should be used, as wood ashes contain considerable alkali and will have a tendency to irritate the skin and bleach the legs of the fowls.



Above likeness is of cock bird that won 1st at Birmingham show, 1914. Also won 1st at Muncie, Indiana, and 3rd at big Indianapolis show. He was shown four times and was placed every one of the four, never getting lower than third. He is only one of a number of extra fine birds bred, raised and owned by C. N. Nichols, Portland, Indiana. You will be interested in his mating list which is free for the asking.

## BRINKLEY'S WHITE ROCKS

"THE BEST IN THE SOUTH"—Eggs and stock always for sale. Write your wants. **W. J. BRINKLEY, Owner; J. H. SLEDD, Superintendent, Box 7, IUKA, MISSISSIPPI.**



# "Pittsburgh Perfect"

## The Only ONE-PIECE FENCE Fabric Welded by Electricity

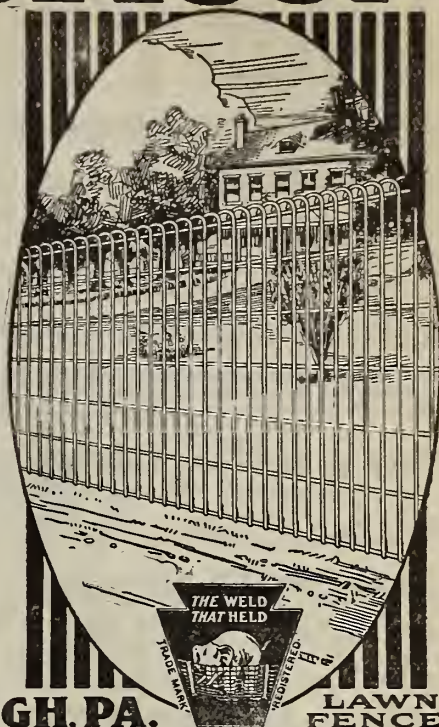
Easily erected. Joints immovable. Wires cannot be slipped or spread. Stands trim and rigid for years. Best looking, strongest, most durable, effective and economical.

All "Pittsburgh Perfect" Fences are made of special-formula Open Hearth wire of high quality, heavily and thoroughly galvanized with pure zinc—the best fence wire produced.

Now is the best time to string that fencing you have been thinking about. Write today for our latest catalogue, full of fence-information and showing "Pittsburgh Perfect" Fences scientifically designed for Poultry Yards, Gardens, Lawns, Estates, Fields, Farms and Ranches. Also ask for special circular illustrating our new Fancy Top Lawn Fence.

### SOLD BY DEALERS EVERYWHERE

All "Pittsburgh Perfect" Brands of Steel and Wire Products are made from Basic Open Hearth material produced in our Furnaces and Mills from the Ore in our Mines to the Finished Product.



**PITTSBURGH STEEL CO., PITTSBURGH, PA.**

## Poultry Shows and Associations

By EDW. M. GRAHAM, Knoxville, Tennessee

Editor Industrious Hen: Writing for publication is entirely out of my line, but being interested in the welfare of the poultry show, I want to relate a recent experience and ask "what are we coming to in the show business?" The experience is this: I made entry in two of the South's big shows the past season, winning in both. From both shows I received ribbons, but, to date, have not received any money. From one I received a lengthy letter, explaining that the show had "gone in the hole" to a considerable extent and asking the exhibitors to purchase stock or donate winnings. Now, Mr. Editor, few of the poultry-breeding fraternity mind the loss of a few dollars in sending to a good show, but it doesn't look like going in the right direction for an association to adopt such means as this for pulling out. There are shows that do not look to outside exhibitors for more than their entry fee and express charges.

For an instance, take the Spartanburg Poultry Association. In 1911 we had a deficit of \$200; again in 1912 a deficit of \$300. Did we ask our exhibitors to pay this for us, in addition to what showing had cost them? The thought could not have hatched with us. We arranged to carry the amount and last year the amount was reduced \$150. We hope to wipe it out this year, entirely.

We always issue check for all winnings, during the show, and our officials and members stand behind any

deficit arising. I am not writing this in the spirit of one who is "sore," but as a warning lest, if it goes on, the show business will be irreparably injured. How can a management expect an exhibitor to send an entry the next season, if he has no guarantee that his winnings will be paid?

My opinion is that it would be better to go over one show season than to send out such a letter as I have mentioned. My own case was only one of a number, in my knowledge.

We may make mistakes, which we are always ready to correct, but we certainly do think all associations should make every effort to pay premiums promptly, and look to the membership for any shortage. This gives confidence to the exhibitor, who swallows his loss like a man if he doesn't win, but likes to know he is going to receive what he does win.

I have had the honor of serving our association as secretary since its organization in 1908, with the exception of 1911 and 1912, and my observations have led me to the above conclusions.

We are going into our 7th annual show Nov. 3-6, with the brightest prospects for the biggest and best show we have ever held. Our new poultry house, well equipped with Empire coops and Mr. J. Harry Wolsieffer, of Vineland, N. J., to place the ribbons is a guarantee of success.

"The Hen" had a pretty good time with us last year and we hope to have her again. We do not allow any "Fountain Pen" fakir in the building.

Very truly yours,

C. W. ANDERSON, Secy.

Spartanburg (S. C.) Poultry Assn.

In saving birds for breeding, look out for good vigor along with breed type. The bird with a tendency to crow-headedness and long toe nails, which denote inactivity, should be avoided as a pestilence.

## POULTRY FENCE

22 1/2 Cents a rod for 48-inch fence. 22 1/2 Fewer posts and no base board or top rail required. Buy from the factory direct. Other styles of Poultry, Farm and Lawn Fencing. Large Catalog free. Write today Box 253 Kittelman Bros, Muncie, Ind.

## CAPON TOOLS

**CAPONS** bring the largest profits—100 per cent more than other poultry. Caponizing is easy and soon learned. Progressive poultrymen use **PILLING CAPONIZING SETS**. Postpaid \$2.50 per set with free instructions. The convenient, durable, ready-for-use kind. Best material. Wealsomake Poultry Marker 25c. Cape Worm Extractor 25c. French Killing Knife 50c. Capon Book Free. G. P. Pilling & Son Co., Philadelphia, Pa.

## FARM FENCE

**11 1/2 cts. a rod** for a 26 in. high fence; 17 1/2 cts. a rod for 47 inch high stock fence; 28 1/2 cts. a rod for a 50-inch heavy poultry fence. Sold direct to the farmer on 30 Days Free Trial. Special barb wire, 80 rod spool, \$1.40. Catalog free. INTERLOCKING FENCE CO. BOX 36 MORTON, ILLINOIS.

**FOR POULTRY**  
**BROWN FENCE**  
**NEW BARGAIN BOOK FREE**  
Costs half as much as common chicken netting, lasts 5 times as long. No top or bottom boards necessary—big No. 9 1/2-2 wires support Brown Poultry Fence perfectly. **Use Half as Many Posts** Bottom wires spaced 1 inch apart—chick tight and rabbit proof as well as stock strong and rust proof. Double galvanized. Sold direct from factory, freight prepaid. Write for money-saving bargain books showing 150 styles of fence and gates for every purpose. Samples also mailed free to test. **THE BROWN FENCE & WIRE CO.** Dept. 37 Cleveland, Ohio. **WE PAY FREIGHT**



# DIXIE POULTRY YARDS

Now is the time for you to get some nice birds at a very low price and if you are interested in Reds, just write me; I can deliver the goods. Eggs from our large flock of free range birds \$1.00 per setting; \$5.00 per hundred. Special matings (exhibition birds) \$2, \$3 and \$5 per setting. No more Leghorns for sale this season, either stock or eggs, as we have sold and booked all that we can handle, but will try to be ready for you next year. Meet us at the fairs this fall and take notice.

**L. P. HUDDLESTON, Manager, STEVENSON, ALABAMA**

## McKEE'S ORPINGTONS

### White and Blue

Winners in keen competition. When in search of the best, just send McKee your name and address. He has searched the old world and the new, trying to find what breed best would do, and he will please you, with Orpingtons, both White and Blue, and Mammoth Bronze turkeys too. White Orpington eggs, \$3.00, \$5.00 and \$10.00 per 15. Blue Orpington eggs, \$10.00 and \$45.00 per 15. Turkeys, \$12.00 and \$15.00 a trio; \$18.00 and \$20.00 a pen. Write your wants to

**McKEE'S ORPINGTON YARDS** GARVEY McKEE, **WATERTOWN, TENN.**  
Prop. Box 1. H.

### WHITE CORNISH OR WHITE INDIAN GAMES

Probably no variety of fowls was so handicapped with a name as was the Cornish under that of Indian Game.

The white variety of the Cornish family originated in America during the World's Fair at Chicago. It is an American production and not an English one as is generally supposed and many are led to believe. White Malay and White Aseel being the foundation upon which the pioneer breeders worked to build up this now very popular variety. White Georgia Game and Wyandotte also were used but it did considerable harm, the former causing them to become very long legged and stilty fowls, the latter to make them loose feathered, also doing much to take away the fine carriage, to say nothing of spoiling the small "anti-freeze" pea combs that they

should carry. True fanciers have done wonders during the last ten years to bring out the great massive, wide frames, thick legs and broad skulls of the real Cornish.

The word "Game" leads many to think this breed was of a fighting variety and are not of a social nature. This is very wrong. No breed of fowls get along as well together as do the Cornish. Of course we will not deny that they can fight, but most anybody rearing chickens have their troubles in this line, for it is seldom that male birds who have never seen each other or have been kept apart for any length of time will make good friends without a few rounds to see who is going to be the boss.

It is an indisputable fact that within the past few years the White Cornish has risen rapidly in the esteem of the poultry fancier. The color of the breed, combined with its elegant shape, appeal to the lover of the beautiful; and its powerful stamp and docile nature command admiration. Not only so, but the poultry-farmer proper has not been slow to recognize the sterling utility qualities of White Cornish since he finds in the breed exactly what is required to produce a perfect type of table fowl. True, the color of its skin and shanks is yellow; but the quality of the flesh and its palatableness are not governed by such points as those. The amount of solid white flesh, covered with thin skin, and the fineness of its quality, make the White Cornish a very valuable table fowl; and there is always a brisk demand for the cocks for crossing with other breeds to improve weight and quality of edible properties.

What combination could beat the White Cornish, massive, pure white in plumage, bright red "anti-freeze" small pea comb with wattles or gills

of red, and orange or bright yellow beaks and legs?

If you want meat of the finest texture and a self-selling fowl, just pluck and cook a White Cornish and note what the palate (or customer) will tell you before and after "the meal." From broiler age up, the White Cornish makes a table delicacy. Their full heavy breasts are characteristic even in chickens and as the plumage is pure white the presence of the white pin feathers is not noticeable.

As to crossing with other fowls:—A Cornish male bird is the only fowl that can be bred to any line of hens, pure-bred mixed or mongrel, and stamp more than two-thirds of his offspring with his own distinctive Cornish type, showing plainly the strength and vigor on his side of the mating. The great quantity of breast and thickness of thighs and legs and its power of transmitting these good qualities make it the ideal bird to head a flock for producing eggs or the handsomest of all table fowls.

At the largest and greatest of poultry exhibitions, The Crystal Palace Poultry Show in England, where the competition is open to the world, the Cornish, or Indian Game fowl have never been beaten as to the "Best table fowl in the world." For the past six or seven years a straight pair of Cornish or Cornish cross breeds have taken all the prizes in this great open event for "The Best."

As to egg production:—If you want eggs at the time when other breeds are wasting a lot of time through the moult trying to put a feather pillow on themselves or in cold weather trying to keep warm, even in a sheltered corner waiting for the spring to arrive, try White Cornish. The Cornish have only about one-third the amount of feathers that other breeds have and what they have got, fit very tight and close to their bodies thus making them able to stand much more cold than the ordinary fowls.

The hens are good layers of large tinted eggs and chickens when hatched grow rapidly after they get past the

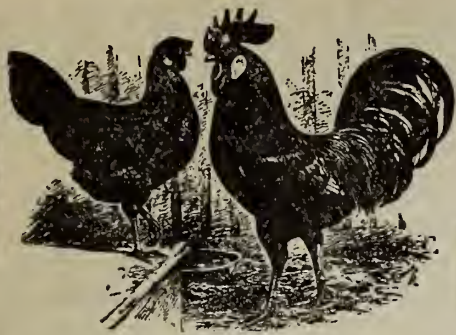


This cockerel was imported from England, and was a winner at the Exposition Poultry Show Knoxville, Tenn., 1913, and also at the Kentucky State Fair and Kentucky Poultry Show. Owned by Chiles & Co., Mt. Sterling, Ky.



Sweepstakes winner at Exposition Show, Knoxville, Tenn., 1913. Also won at Allentown, Pa., Kentucky State Fair and Kentucky Poultry Association. Owned by Chiles & Co., Mt. Sterling, Ky.





## Brown Leghorns

Eggs One-Half Price  
During April and May

Some "Brown Beauty" eggs at bargain prices. I have not been advertising eggs for sale this season. Have accepted a few orders at regular prices, \$3.00 and \$10.00, where it did not interfere with my own hatching. I have some remarkably fine matings and offer a few sittings at 1-2 price during April and May. Would advise placing orders early. Any orders received which can not be filled, money will be returned at once. Remember it takes a "Brown Beauty" to beat a "Brown Beauty." Circular free on application. J. H. HENDERSON, Knoxville, Tenn.. Breeder of Brown Leghorns since 1890.

first week or ten days. When full grown these fowls weigh from ten (10) to twelve (12) pounds for males and seven (7) to eight (8) pounds for females and often exceed these weights. We have some cocks that will weigh 13 to 14 pounds and hens 9 to 10 pounds.

As to fertility in eggs:—No other breed than the Leghorn will show such a high percentage of fertility the year round as do the White Cornish. With Cornish you do not have to wait until spring before you get a reasonable amount of fertile eggs, but can start hatching as early as you like, thus getting the start on the lazy "feather bed" varieties. Early chicks mean early broilers and big laying chickens before the cold weather sets in. This counts. One hundred per cent fertility in an incubator is not rare with us.

In conclusion, the White Cornish contains the good features of every breed combined, making it the ideal farmers' and poultrymen's fowl.—C. C. Manners, Mountville, Va.

### CARING FOR BROWN LEGHORNS AND WHITE ROCKS

Since keeping a record of profit and loss from our flocks of Brown Leghorns and White Rocks, I would like to tell your readers of the satisfactory results, and how they were obtained.

As to Brown Leghorns—in the first place for years we have been selecting and breeding for size and vigor, rather than color points of hackle and saddle stripe, or the low tailed White Leghorn type seen so often in the show room. We cull any birds with disqualified plumage or points, but prefer to breed from broad backed

W. C. LASSITER

MRS. W. C. LASSITER

Black

# ORPINGTONS

Our stock is of the highest quality. Shipped on approval. A few Norfolk, Va., winnings, January 6-9, 1914: Silver cup, 10 best birds in show; Silver cup, best male bird in show. Three other cups, and a number of specials. Lynchburg, Va., 1914: Five firsts on five entries. Stock and eggs for sale. Write for mating list.

LASSITER ORPINGTON YARDS, Highland Park, RICHMOND, VA.

## GABHART'S White LEGHORN EGGS

Fertility guaranteed and to arrive in a safe condition from the finest exhibition matings, \$5.00 per 15. Others \$3 per 15. From pure stock on range \$1 per 15; 100, \$5. You know my show record. W. E. GABHART, Box M, Bohon, Ky.

# QUINTIN'S

Single Comb **RHODE ISLAND REDS** The Winners

COLOR, TYPE AND UTILITY

Southside Fair, 1913: 1st, 2nd, 3rd, cock; 3rd and 4th hen; 3rd pullet; 1st and 2nd cockerel; 1st, 2nd and 4th pen.

Richmond, December, 1913: 1st cock; 3rd hen; 4th cockerel; 1st and 3rd pullet; 3rd pen.

Norfolk, January, 1914: 1st and 4th cock; 1st and 3rd hen; 1st pullet; 2nd and 4th cockerel; 1st pen.

Lynchburg, January, 1914: 1st cock; 5th hen; 4th cockerel; 1st and 4th pullet; 1st pen.

The above are some of my recent winnings in the hottest kind of competition and speak for the quality of my birds. I still have a number of good cockerels for sale at reasonable prices. Stock and eggs guaranteed as represented. Send for mating list for 1914. Visitors always welcome.

D. SCOTT QUINTIN :-: Box 174 :-: PETERSBURG, VIRGINIA

specimens, which indicate their alertness by carrying tails erect. In fact this point, together with the uniformity of color, suggested the name, "Brown Squirrel Strain."

The winter has been rather open, but past experience throughout zero weather has led us to depend upon at least a fifty per cent egg yield, fall and winter. Before fresh meat cuts the price of poultry, we cull closely, sending to market any undesirable birds. Since the effect of free trade and cold storage must be considered, the successful poultry keeper can not afford to retain a lot of non-layers.

The hens must have comfortable quarters, not only that, but they must be kept in them during rough weather. Nothing is gained but much lost by allowing them out in the wind, sleet and snow. However, they must have indoor occupation to keep them interested. Also, grit, oyster shell, and some kind of green feed. Until this winter we always had plenty of cull apples, but pumpkins, turnips, or cabbage answer the purpose. Circumstances, and climate, of course, vary in different sections.

We find it pays to fill bags and bags of leaves from a near-by grove.

How the youngsters enjoy the combined work and play, knee deep in the rustling leaves on a crisp fall day! and then, what new life it puts into the hens, in midwinter and how the leaves fly as they come down to scratch for their breakfast of mixed grain, which had been scattered at locking up time the evening before after they had gone to roost. Does not starting the day full of interest and work mean as much to the lower animals as it does to man? I think it does.

We are particularly fortunate in having the poultry houses in a walnut grove, where the nests can be raked up on the terraces by the bushes. These help in the egg yield, are greatly relished and keep the hens busy much of the time picking out the goodies—and no nut-picks can do it more effectively.

So much has been written about feeding that I will not dwell on this topic, but let me emphasize these points: Breed from only strong, vigorous stock, which, of course, has had range; cull close before the profits are eaten up by a lot of lazy non-layers. Remembering too, that free trade and cold storage make spring



# BRED-TO-LAY Single Comb MINORCAS Black-White

Eggs from our great utility flock \$1.25 per doz. High class show birds \$5.00. From best Minorcas south of Ohio River, \$10 per dozen.

PARK MINORCA FARM,

RICHMOND, KENTUCKY

## A Natural Poultry Land

Poultry do best in an open winter country. It is artificial to house birds 4 to 5 months in the year.

In the open air, with ample green feeds the year around, they lay better, grow faster and are more vigorous.

The Southeast is a natural poultry region. A growing season of 200 to 300 days annually (varying with locality) allows for a wide range of green foods the year round and reduces the cost of maintenance to a minimum.

If you intend starting in the poultry business and have but limited means, no section can offer you more certain success than the Southeast.

### Land at \$15 an Acre up

prices varying with improvements and location, can be purchased in many sections near to good local markets. A Northern Florida poultryman sells his eggs the year around to a local hotel for 40 cents per dozen. Thus profitable home markets are assured. Small fruit growing in connection with the poultry business makes a profitable combination.

Send at once for the "Southern Field" magazine, lists of farms for sale and other information you may desire.

M. V. RICHARDS, Land and Industrial Agent  
Room 51 Southern Railway Washington, D. C.

Mobile & Ohio R.R.  
Southern Ry.  
Ga. So. & Fla. Ry.

eggs almost as high as those of winter, which can only be made by costly grain and extra care; leaves make a light clean litter in which hens delight to scratch for scattered grain and cracked nuts; keep water or skimmed milk before them all the time; and above all, keep the hens up in rough weather, but encourage exercise and free range on open days.—Mrs. W. B. Doak, Clifton Sta., Va.

### BEST TIME TO HATCH BROWN LEGHORNS

In stating what is the best time to hatch Brown Leghorns, there are two things specially to be considered, namely, fancy and utility purposes, and I have always found the two go together, as the well developed, vigorous bird wins the prizes and makes the best layer and breeder in almost every case. There is one other condition that may influence the time of

hatching, and that is climate; the warmer the climate the earlier the chicks can be handled with success, but this will deal only with my experience for the past ten years.

The first hatch should be off about March 1st, the object being to get birds matured for the early shows and layers during the season when the hens are moulting, a condition during which no breeder can afford to feed for eggs if he expects to produce healthy, strong chicks the next season. All matings should be made by January 1st and the best care given the breeders to insure fertile eggs and strong, vigorous chicks at this time when weather conditions are usually bad, but chicks from stock that have been properly bred and cared for, will thrive as at no other season, regardless of cold if kept in a dry, open front house. At this point it is well to add that with Brown Leghorns, a good incubator with pedigree trays to mark chicks from each mating and brooders, the majority of our troubles are eliminated so far as getting early chicks is concerned and the quality of chicks raised will not be lacking if early brooder chicks are given half a chance. The next hatch should be off by April 1st and as many chicks as one intends to raise, hatched during this month if possible. By this method all chicks are near enough the same age to have an equal chance after being given free range and develop much better, with a smaller per cent of culls, both as to size and color.

From a fancier's standpoint, where space for chicks is limited, the March hatched cockerels develop into much larger birds and one can cull out all but the very best before the April hatched chicks (which should be largely from the pullet-line) are old enough to have free range; hence we are able to eliminate the worries a large number of cockerels cause when allowed to run with younger chicks.

From a utility standpoint pullets hatched during March and April almost invariably make good winter layers, being near the same age, can be housed without the disadvantages of the older birds forcing the younger ones away from feed, hence pay better than birds of several different ages. However, the colony plan of rearing chicks, makes it possible for the utility man to hatch Brown Leghorns any time up to the latter part of June keep the different aged chicks separated and produce layers that are hard to surpass. Taken as a whole, my experience has been, Brown Leghorns when hatched during March and April and reared even under ordinary conditions, will develop in from five to seven months into veritable egg machines, the most beautiful fowl ever produced and one that needs no boosting when once given a trial in any climate or with any breeder from the city lot to the largest farms.—Dr. H. T. Boyd, Sweetwater, Tenn.

See that your fowls have a supply of charcoal where they can help themselves at will. It is a healthy promoter and will help to keep the birds in good condition.

Potassium permanganate and several of the commercial roup cures combine chemically with tin or iron. The result is that when they are given in the drinking water they eat holes in the pans and fail to do the birds any good. Where the water clears or changes color soon after putting the medicine in, when a tin or galvanized pail is used, the trouble can generally be avoided by using a crock.



Second cock, Illinois State Fair, 1912, bred and owned by Buschmann-Pierce Red Farms, Carmel, Indiana.



A prize winning R. C. Red. Bred and owned by Buschmann-Pierce Red Farms, Carmel, Ind.





## THE BEST MONTH OF THE YEAR TO SET EGGS IN IS

# APRIL

We have more eggs than we know what to do with. They are from that well known strain of D. W. Young WHITE LEGHORNS, and we are going to put a special price on them. Eggs, 15, \$1.50; 30, \$2.50; 60, \$4.00; 100, \$6.00; all charges prepaid. Time is money. ORDER DIRECT FROM THIS AD. EGGS GUARANTEED.

STEERE'S POULTRY FARM :- Route 2 :- Box 79 :- KNOXVILLE, TENN.

## Our Breeders and Their Birds

By EDW. M. GRAHAM, Knoxville, Tennessee

Henry W. Lester, Thomasville, Ga., the White Plymouth Rock man, has in his flock winners from such shows as Atlanta and Augusta, and has pens mated especially to supply the egg trade. Read his ad. in The Hen before you place your order.

We wish to call attention to the ad. of Lively Poultry Farm, Augusta, Ga. which you will find in this issue. This farm breeds Crystal White Orpingtons exclusively, and their slogan is "Lay lively; look lively." Look up their ad. and write them before you purchase..

Sandy Run Poultry Yards, Ellenboro, N. C., informs us that they will send twenty eggs for each setting on all orders received in April. The breeds they handle are Partridge, White and Columbian Wyandottes, Black Minorcas, Brown and White Leghorns. See their ad. elsewhere in this issue.

C. L. Loyd & Son, Greensburg, Ind., breeders of prize-winning Partridge Rocks, have issued a handsome mating list, which gives their winnings and matings. They have won the blues at such shows as Indianapolis, Chicago, Cincinnati, Cleveland and Nashville. Read their ad. in this issue and write them your wants.

Buschmann-Pierce Red Farms, Carmel, Ind., breeders of Rose and Single Comb Rhode Island Reds, inform us that they never had better pens mated for the egg trade than this season. Their mating list for 1914 is full of valuable information for prospective buyers and you should write for a copy. See their ad. in this issue of The Hen.

S. B. Dillard, Spartanburg, S. C., recently purchased from C. W. Anderson his entire flock of White Wyandottes, including all his fine winners, and he is prepared to furnish eggs from them at reasonable prices. Mr. Dillard says he has some of the best Buff Rocks in the South and can furnish eggs from them also. See Mr. Dillard's ad. in The Hen.

We are in receipt of mating list from C. E. Spaugh, Rugby, Ind., breed-

## S. C. WHITE LEGHORNS

EGGS! EGGS!! EGGS!!! from Lawson's Blue Ribbon Egg Machines by the 1,000 at less than half price. Get eggs from the world's best egg producers. The best by 12 years' test, large white eggs. Sell in New York for 5 cents more per dozen. For fresh, strong fertile eggs, send to

White Hill Poultry Farm A. J. LAWSON, Prop.  
Route No. 4 Box H Cleveland, Tenn.

## BARRED ROCKS Buff ORPINGTONS

Eggs from heavy laying strain, farm raised \$1.50 per setting. Satisfaction guaranteed.

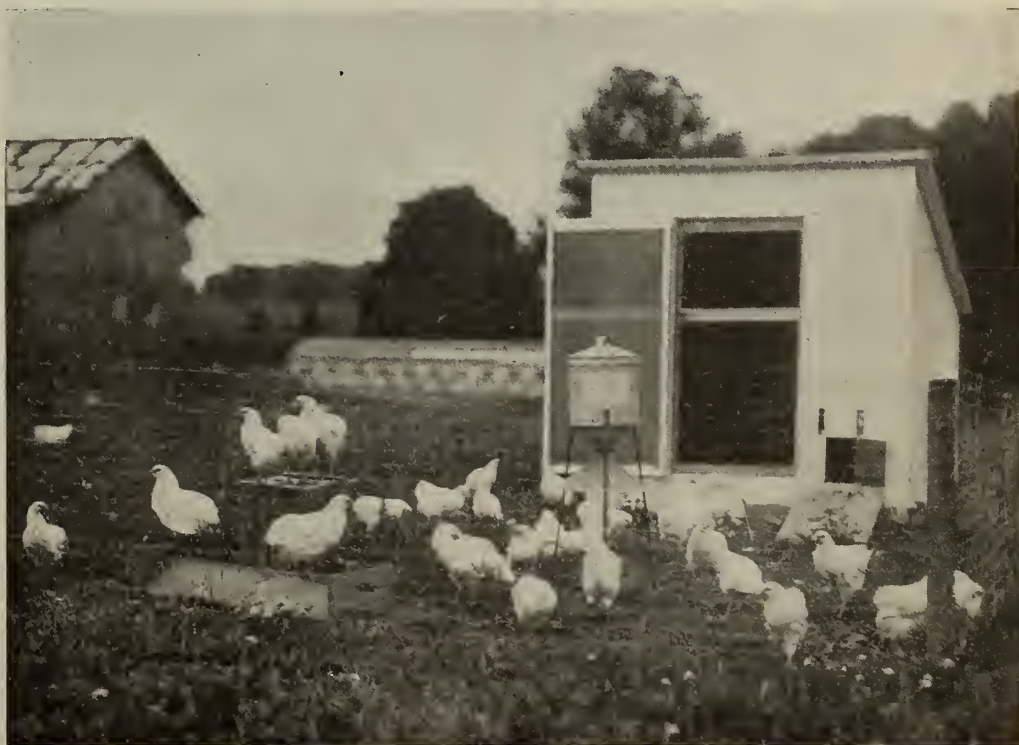
OAKLAND STOCK FARM, A. S. Bell, Mgr., R. 13, KNOXVILLE, TENN.

er of Barred Plymouth Rocks. Mr. Spaugh has originated a famous egg-laying strain of this popular breed and has 14 yards specially mated for the egg trade. He is prepared to furnish eggs from either fancy or utility matings, also incubator eggs. Read his display ad. on the back cover page and then write him.

Brook Lawn Poultry Yards, Brush Creek, Tenn., continue to carry away the lion's share of premiums at the shows on their champion Buff Leghorns. At the Nashville show last month on six entries, in one of the hottest classes in the show, they won

1st, 3rd cock; 1st hen; 2nd pullet. No pens were shown as birds had been previously mated. See their ad. in this issue, and write your wants.

R. H. Anderson, Lynchburg, Va., breeder of S. C. Black Minorcas, furnishes us with a list of his winnings as follows: Roanoke, Va., Fair, 1913—2nd cockerel; 1st and 2nd hen; 1st and 3rd pullet. Special for best hen in the show. Lynchburg, Va., Fair, 1913—1st and 2nd hen; 1st and 2nd cockerel; 1st and 2nd pullet. Hagerstown, Md., Fair, 1913—entered two hens and won third in a class of thirteen hens. Atlanta, Ga., 1913—on six



A flock of youngsters as seen now on our plant. Bred and owned by J. C. Fishel & Son, Hope, Ind.



# WHITE Plymouth ROCKS

Winners for years at the best shows. Are offering special mated trios at \$7.50, \$10.00, and \$15.00. Pens at \$10.00, \$15.00 and \$20.00. Cockerels, \$3.00 and \$5.00. Eggs from select matings, \$2.00 per 15. From all exhibition matings, \$5.00 per 15. Incubator lots of 50 or more at \$10.00 per 100. Send us your orders. We guarantee satisfaction.

PATTERSON FARM

--

FITZGERALD, GEORGIA

## AN EXTRAORDINARY OFFER

It is that we are making on eggs from our grand matings of S. C. White Leghorns and S. C. Black Minorcas. Write us at once for prices on stock, or the egg offer.

MOUNTAIN VIEW FARM

--

Box 4-H

--

MOORESBORO, N. C.

### "DRYING UP!!"



SEE THAT "XX"?

That is the cry everywhere. "My chicks are drying up in the shell, will your Tester help me?"

Most assuredly. Don't incubate eggs unless they first pass the Magic Egg Tester. "XX" eggs hold moisture best, hatch best, and make the chicks with backbone, health and vigor. Impossible to hatch one egg this Tester rejects. \$2.00 each. 1 year's trial. Guaranteed. Cost refunded if dissatisfied.

MAGIC EGG TESTER WORKS, Dept. G, Buffalo, N. Y., also Bridgeburg, Can.

## King of.... Poultry Tonic

Mac-  
nair'sChicken  
Powder

Kills Hawks, Crows, Owls and Minks; also diseases of Chickens and Turkeys; Gapes, Cholera, Limber Neck, and Indigestion. Keeps them free from Vermin, thereby causing them to produce an abundance of eggs. Send 30c in stamps for a sample package. Guaranteed or money refunded.

W. H. MACNAIR'S CHICKEN  
POWDER CO., Tarboro, N. C.

entries, 1st cock; 1st and 5th hen; 1st cockerel; 1st pullet; and 1st pen; a clean sweep. Lynchburg, Va., 1914—at the state meeting of the American Black Minorca Club, in the hottest competition, 1st and 3rd cock; 1st, 2nd, 4th and 5th hens; 2nd and 5th cockerels; 2nd, 3rd and 4th pullet; and 1st pen; American Black Minorca Club State cup for best cock, hen, cockerel and pullet shown by one exhibitor. See his ad. in The Hen and write him. He has several pens mated for the egg

trade and places a guarantee behind his shipments.

One of the most progressive poultry farms in the "Old North State" is that of Mountain View Farm, Mooresboro, N. C., of which Mr. D. R. McBrayer is manager. Mr. McBrayer breeds S. C. White Leghorns and S. C. Black Minorcas, and has birds of high show winning qualities. He is prepared to furnish eggs from grand exhibition matings; also incubator eggs. Pens headed by cockerels from trapped hens with high records. See his ad. in The Hen.

DeWitt C. Bacon, Guyton, Ga., informs us that he is very busy hatching chicks. The day he wrote us, he took 600 from the incubator, including day-old chicks sold, custom hatches and chicks that went to the brooder house. Mr. Bacon further states that he is hatching from four to eight hundred every fifth or sixth day. His breeds are S. C. White Leghorns, Buff Orpingtons, White Plymouth Rocks, and S. C. Rhode Island Reds. See his ad. on the fourth cover page.

W. A. Meyer, Bowling Green, Mo., breeder of champion strain Black Langshans, furnishes us with his winnings this season, as follows: Pike County Fair, 1st, 2nd hen on two entries; Little Rock, Ark., 1st cock; 2nd, 3rd, 4th hen; 1st cockerel; 1st pullet on seven entries; St. Louis, Mo., 1st, 2nd, cock; 2nd, 3rd hen; 1st, 2nd, 3rd cockerel; 1st, 4th pullet; 1st pen. Mr. Meyer has several pens headed by prize winners and can furnish eggs on short notice. See his ad. in The Hen.

One of the foremost poultry breeders and fanciers in the South is O. B. Andrews, of Chattanooga, Tenn. Mr.

Andrews is the originator of the famous "Efficiency (100 per cent)" strain of Barred Plymouth Rocks and S. C. White Leghorns, and his winnings at the leading shows the past season fully confirm his claims. Mr. Andrews has several pens of both breeds mated for the egg trade and can supply your wants on short notice. See his large ad. on the back cover page and the pictures of some of his winners in this issue.

Elam M. Leary, R. F. D. No. 6, Greenfield, Ind., breeder of R. C. Rhode Island Whites, has made some good winnings this season. At Indianapolis he won 2nd, 3rd pullet, 1912; and 1st cockerel; 4th hen; 5th pullet; A. P. A. silver cup, 1913; 1st pullet; 2nd cockerel, 1914. Fortville, Ind., 1st cockerel; 1st and 3rd pullet; 1st and 2nd hen. Richmond, Indiana, 1st cockerel; 1st pullet; 1st, 2nd, 3rd hen. New Castle, Indiana, 1st cockerel; 1st, 3rd pullet; 1st hen. See his ad. in The Hen.

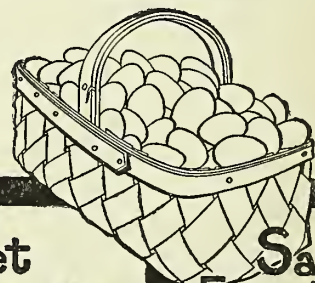
### A GOOD SLOGAN

J. H. Henderson, the originator of the "Brown Beauty" strain of Brown Leghorns, has a slogan: "It takes a 'Brown Beauty' to beat a 'Brown Beauty,'" in keeping with the Browns he breeds. Those who have met his birds in the show room know how true it is. He has been breeding Brown Leghorns since 1890. He often has pullets to begin laying and paying at 4 months, 10 days old. Look up his ad. this month for bargains in "Brown Beauty" eggs.

### MRS. CALLAWAY'S EGGS

In this issue of The Industrious Hen you will find the large display ad. of Mrs. P. T. Callaway, Washington, Ga., breeder of S. C. Rhode Island Reds. In a letter just received from Mrs. Callaway she informs us that she has already hatched all the chickens she has room to handle, and that she is in position to furnish either eggs, baby chicks or stock on short notice.

Her show winnings at Knoxville, Hagerstown, Atlanta and other big



Get  
Eggs Now

You can make your hens lay and have eggs to sell now when eggs are high by using

**Conkey's Laying Tonic**

A Regulator and Tonic. Puts whole flock in condition. Satisfactory results or money back. 25c, 50c and \$1. In pails \$1.60 and \$3.

The G. E. Conkey Co., Cleveland, O.

Save  
Fowls from Roup

For sneezing, coughing or moping fowls put in the drinking water

**Conkey's Roup Remedy**

A Preventive and Remedy. Fowls take their own medicine. Keep on hand and save your flock. 25 cents, 50 cents and \$1.00





## BARRÉD PLYMOUTH ROCKS

Eggs and Baby Chicks from Exhibition and Pedigree matings. Our winnings at Chicago, Indianapolis, Cincinnati, Louisville, Nashville and Knoxville prove our quality. Do not place order until you get our big catalogue. Your name and address on a postal brings it by return mail. Write for 40-page catalogue No. 7

**POPE & POPE, Box R, LOUISVILLE, KY.**



shows, guarantee the superb quality of her Reds. If you want as good as can be had in the Rhode Island Red line, write Mrs. Callaway your wishes. Be sure and read her ad. which you will find elsewhere in this issue.

### HICKS' ANCONAS AND LANGSHANS

Dr. Elias Peter Hicks, Bound Brook, N. J., is one of the best known interstate breeders of Black Langshans and S. C. Anconas. His birds have been winners at the best interstate shows, including Easton, Scranton and Philadelphia, Pa., Hempstead, and Grand Central Palace, New York; Paterson, Morristown and Asbury, N. J. Dr. Hicks also made a fine winning at Augusta, Ga., last year on both Anconas and Black Langshans. For a complete list of his winnings for the season of 1913 see his circular, copy of which will be sent free on request.

Dr. Hicks has 50 acres devoted to poultry and is quoting eggs from his utility and exhibition matings at very reasonable prices. He has also made some championship matings, which contain the best of his very choice birds. The idea of the quality of this breeder's birds may be obtained from his recent winnings at the Palace show, New York, December, 1913, where he won on Black Langshans: 1 cock; 2, 3 hen; 1, 2 pullet; 3, 5 cockerel; 1 pen. At Philadelphia December, 1913, he won: 2 cock; 2 hen; 1, 3, 4 cockerel; 1, 2 pullet; 1 pen; silver cup for best display.

Dr. Hicks' Ancona matings will be headed by his grand cock bird which won 1st at the Palace, 2nd at Philadelphia and 3rd at Madison Square Garden December, 1913. This bird has been handled by a number of different judges and pronounced one of the best Anconas in the country today.

### OBJECTS TO CHANGING STANDARD

The Industrious Hen: I have just read in the March issue of your paper the following:

"In a recent conversation with Mr. L. H. Reade he expressed himself as very much pleased to hear that the Barred Rock Club went on record at the annual meeting in favor of reducing the standard weight one-half pound on the Barred Rock cock and hen, as it will be remembered that it was Mr. Reade who led the fight for this reduction at the A. P. A. convention at Atlantic City, ably seconded by Mr. A. R. Smith, and with the approval of the foremost Barred Rock breeders of the country, including all those present at the convention.

## BEVERLEA PLANTATION

POULTRY DEPARTMENT HARRY LEE HARLEE DARLINGTON, S. C.  
Owner and Manager

America's foremost strains, range raised, trap-nested, White, Black and Buff Orpingtons, Partridge Rocks and Dark Cornish Indian Games. South's champion flock of Fawn and White Runner Ducks. Breeders and exhibition birds for sale at all times. Largest and best equipped poultry plant in the Southeast. Pens scientifically mated and headed by imported and Southern champion males. Our Mr. Harlee is secretary and treasurer Eastern Carolina Poultry Association, vice president Poultry Department South Carolina Live Stock Association and member A. P. A. Illustrated mating list and poultry guide free.

## DIXIE'S QUALITY STRAIN

White Wyandottes have won more regular and special prizes than all others combined at three leading shows this season. The strain that is bred to lay as well as win. Eggs from the best pens I have ever mated, which means quality, \$2.00, \$3.00, \$5.00 per 15. Write for mating list.

**CARRINGTON JONES, Box 145, BUNTYN, TENNESSEE**

"Though defeated at Atlantic City by the White Rock breeders this motion will be presented again at the next A. P. A. convention.

"This contemplated reduction in weight will make far better egg production, finer feathering, and in reality is only a case of making the standard fit the Barred Rock as now bred."

The last paragraph of this article shows exactly the weak and selfish motive of this proposed reduction. I have always looked on the standard as being the Standard of Perfection, an ideal set up for breeders to breed to, and not for the standard to be made to fit the birds bred. Is making the standard to fit the Barred Plymouth Rock as now bred doing justice to the other varieties of Plymouth Rocks? Why not make it to fit the others as now bred? It seems that some of the other varieties are being bred very close to the high ideals set up by the standard. Are the Barred Rock breeders going to pull all the other Rocks down to their ideas of perfection, just because they find it hard to breed up to the right weights because of too much bars? I don't believe the others will stand for it. I cannot conceive of this being right. If we make the standard weights to fit them now, how about ten years from now? Suppose we will have to reduce another half pound to cover up their lack of attention to size and vitality.

A great deal of the trouble in undersized specimens can be traced to the fact that certain breeders shut their eyes as to the size and health side when they find the feathers they want. Good feathers can be had together with the correct sized frames to carry the necessary weight if birds

## S. C. ORPINGTONS of QUALITY

Eggs for hatching, day old baby chicks. No stock for sale. Prices reasonable. Prompt service. Satisfaction guaranteed.

If You are Looking for Orpingtons  
We're Looking for You

## TANGLEWOOD FARM


Box 104  
MORRISTOWN, TENN.

of good health, size and vigor are used in the breeding pens, and not some sickly specimens used just because they are finely barred. Breed them with large frames to carry the required weight and they will be as good layers as the small birds. The trouble is weight is sometimes forced on small frames producing overfat birds that are absolutely worthless as layers.

I, as a breeder of White Rocks, am very much opposed to any reduction whatever in weight, for the White Rock breeders can breed birds with size called for in the standard and so could the others with proper effort.

From my personal experience I find

See "BUCKEYE"



Guaranteed to hatch every hatchable egg. Over 325,000 in use. Send for Catalogue and dealer's name where you can see one and how it works.

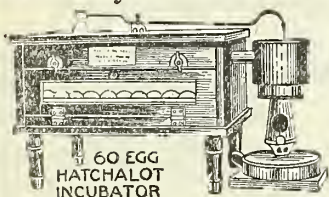
The Buckeye Incubator Co.  
525 Euclid Avenue Springfield, Ohio

**SOLD AS LOW AS \$10.00**



## Use This Hover In Any Building

You need no special equipment for the International Sanitary Hover. You can use it in a laying house, a colony house, tent, barn, stable, piano box, or even a dry goods box—no platform to build, no holes to cut. To set it up, you simply light the lamp and set it down, and it is ready for instant service anywhere. Weighs 30 pounds, easy to move. Made of metal, and always sanitary. Heavily insulated. Circular—no corners for crowding—and warmest just inside the curtain. Heat radiates from *above*. Capacity 100 chicks—more hovering space than any other hover. Price \$8.50 complete.



The 60-Egg Hatchalot Incubator assures you healthy chicks, with husky constitutions. Large boiler and dependable regulator gives mild, moist, natural heat. Made of clear cypress—built to last. Price, \$7.50.

## Hatch Chicks Right

## Save Money and Work in Feeding

Make your fowls work for their food and save grain and labor by using the 6 in 1 Exerciser Feeder. Fill it in the morning and fowls feed themselves. Large central hopper holds grain that the birds scatter in the litter, by working an agitator. Six other compartments hold dry mash, grit, shell, beef scraps, etc. Always clean; double flange around rim prevents wasting feed. Makes other feeding devices unnecessary. Price, 40-quart, \$4.75; 20-quart, \$3.75.

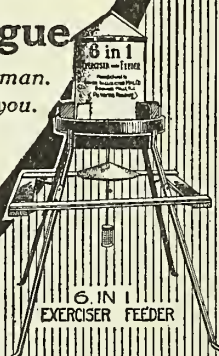
## Send a Postal for Catalogue

full of information of value to every poultryman.  
Ask, too, for the name of the dealer nearest you.  
Get the catalogue now.

**Hover-Incubator Mfg. Co.**

Box 187, Browns Mills  
New Jersey

**Sold by  
Dealers  
Everywhere**



er the breeding stock is pure bred and that the birds themselves are well marked, good shaped, healthy, active specimens; whether they have plenty of yard room and house room; whether eggs will be fresh and fertile, carefully handled, carefully packed. This is the age of specialties; carelessness and inattention are the gates to failure. I am a great admirer of the grand old domestic breed, the Barred Plymouth Rocks, upon which I bestow most of my time and thought, though I raise the Mottled Anconas, also the Mammoth Bronze Turkeys.

I love my fowls; I have studied them most carefully from every point. I am beginning to succeed from my many failures. Don't give up. Make every failure a stone in your monument of success, is my motto. I don't know how to write and fear I have said little to encourage and help. I would advise all beginners to love their birds, study them and their needs; become thoroughly acquainted with each individual. As love is the key-note to a happy successful life, so it is to a happy prosperous poultry yard. If you are undecided what breed to raise, buy the Barred Plymouth Rock. If you want to improve your flock, get a setting or two of eggs; if you want to make a little money, buy eggs by the 100 or day-old chicks, raise them in an old house when the weather is bad and you can't do anything else, and you will be rewarded for your patience with a nice sum of money.—Mrs. Garnett Poindexter.

The term strain is applied to fowls which have been carefully bred by one breeder until they have acquired individual characteristics. The best strains of all varieties show their breeding by producing a larger number of birds that nearly conform with the standard than those that are bred without regard to blood lines.

**Try a Classified Ad. in The Hen**

my birds that approach nearest the standard of perfection are the best layers, and good, healthy, vigorous birds that are always on the job. The quality can be decided by looking over my show record. As to the laying qualities, ask any White Rock breeder who has the quality kind.

I sincerely hope the White Rock Clubs together with other Plymouth Rock clubs will fight to kill this proposed change in weight. It is not much, but tampered with again means the same thing in years to come.—Frank A. Potts, Charlotte, N. C.

## EGGS FOR HATCHING

Now is the time to hatch chickens. Do not put it off another day. The weather may be cold and unpropitious but was ever anything accomplished unless there were obstacles to be over-

come? Chickens hatched in April will make pullets just the right age to begin laying next fall when eggs are highest, and the cockerels make appetizing broilers for home consumption, or will bring quite a fancy price in market. The egg business is growing in magnitude and importance. Just now we are particularly interested in eggs for hatching, which is the most necessary and important branch. Every poultry paper and farm journal is filled with such advertisements. The eggs are variously described and as varied in price, ranging from 75 cents to \$12 a setting. A beginner is at his wits ends to know what to buy. It is well to know a few essential items even about buying eggs and if the breeder evades and does not satisfactorily answer the question, rest assured his eggs will not be satisfactory either. It's important to know wheth-



**"Princess"**  
White Orpington Pullet  
WINNER FIRST

Charlottesville, Nov. 1912.  
Richmond Jan. 1913.  
SILVER CUP BEST PULLET IN SHOW.  
Bred By  
F. S. BULLINGTON, RICHMOND, VA.



# WYANDOTTES, LEGHORNS, ANCONAS, CORNISH

Eggs and Day Old Chicks for Sale. Prices Reasonable for Quality Given. Write for Circular.

GOAT ABERNETHY

LENOIR, NORTH CAROLINA

**Look Out**  
for Chicken Thieves!

Examine your birds and see if lice are not robbing your poultry of health and vitality, and yourself of profits. Get the **Old Reliable**

**LAMBERT'S**  
**DEATH TO LICE POWDER**

(6)

It knocks these thieves out **quick**. Will not injure eggs, hens or chicks, nor soil plumage. Sold in 10c, 25c, 50c and \$1.00 sizes. Latest copy of Lambert's "POCKET BOOK OF POINTERS" for 2c stamp.

O. K. STOCK FOOD CO., 513 Traders Bldg., Chicago

## HOW TO KILL AND BLEED POULTRY FOR MARKET

"Grasp the chicken, when killing, by the bony part of the skull. Do not let the fingers touch the neck. Make a small cut with a small sharp-pointed knife on the right side of the roof of the chicken's mouth, just where the bones of the skull end. Brain for dry picking by thrusting the knife through the groove which runs along the middle line of the roof of the mouth until it touches the skull midway between the eyes. Use a knife which is not more than 2 inches long one-fourth inch wide, with a thin, flat handle, a sharp point, and a straight cutting edge."

The above instructions on the proper methods of killing poultry were issued by the Department of Agriculture. At least 3 per cent of all the poultry coming into the New York market is incompletely bled. Much of it is so badly bled that it results in a loss of from 2 to 5 pounds, as compared with the corresponding poultry which is well bled and in good order, continues the department. Aside from the bad appearance of incompletely bled chickens, their keeping properties are very inferior. The flesh loses its firmness sooner; its flavor is not so good; the odor of stale flesh and finally of putrefaction comes sooner; and in every way the product is more perishable.

A very large proportion of the unsightly poultry in our markets aside from the rubbing and tearing of the skins, is caused by an incomplete removal of the blood. This is evidenced by red dots which frequently occur where the feathers have been removed, especially over the thighs and wings, or by the small veins, which mar the appearance of the neck. Generally it is the neck which shows most plainly the presence of the blood in the fowl, or that a wrong method has been used in cutting the blood vessels in an attempt to empty them. The neck is the first part to discolor, becoming first red, then blue

## SINGLE COMB BROWN LEGHORNS EXCLUSIVELY

Winnings this season at National Conservation Exposition, Knoxville, Tenn., Sept. 1913, 1st, 3rd hen; 1st, 2nd pullet; 1st, 2nd cockerel, and 2nd pen. At Pensacola, Fla., Nov., 1913, 1st, 2nd hen; 1st cockerel; 2nd pullet; 1st pen. Our stock all bred on the single mating plan for heavy egg production. This stock also has the size and combs that show constitution and vigor. Eggs guaranteed to hatch, at \$1.50 per 15. Day old chicks guaranteed to live, at 15c. Mature stock guaranteed to please, at \$2.00 and up. Special prices on larger quantities. Satisfaction and promptness our specialties.

STURTEVANT BROS. BROWN LEGHORN FARM, Box 12, KUSHLA, ALA.

ish red or purple, and finally green as aging progresses.—U. S. Department of Agriculture.

### THE BUCKEYE.

The Buckeye is a wonderful breed of fowls and is an all purpose breed in every sense of the word.

A true fancier who loves a red fowl never passes them by, once he has bred them, as they are easy to breed, requiring no double mating to produce good fowls of both sexes, and they are a genuine red.

The utility side of the question is this: The Buckeyes have never been excelled by any breed and equalled by few. This is rather an extravagant claim for a new breed, but it is the truth nevertheless, and I feel sure that all Buckeye breeders will back me up in the above statement.

As egg producers they are not even excelled by the Leghorn or the wonderful Indian Runner Duck. They lay winter and summer, when moulting or any other old time. Just give them the feed to produce eggs and they will do it all right; pullets lay as young as any breed; their eggs are of a rich brown color.

The Buckeye is not a persistent setter, but when set will hatch every hatchable egg and make excellent mothers.

## THE "RIBBON STRAIN" B. P. ROCKS



You can't buy winners and mate them the first season, and produce winners. They must be line bred. The Ribbon Strain Barred Ply-

mouth Rocks are line bred. Nearly every bird on my place is fit to grace the show room. WISTAR POULTRY FARM, R. F. D. No. 1, Dumbarton, Virginia.

They are gentle and easily confined, yet when given their liberty they are fine rustlers. They are one breed that has both utility and fancy qualities, I don't say they are the only good breed of fowls for there are many other breeds that are good and all breeds have some good points, but I believe the Buckeyes have more good points than any other breed, yet that is more a matter of individual taste. I am partial to the Buckeyes. There is one thing that is in their favor and that is when a person begins to breed them, they continue to do so.—Mrs. H. P. Hinton, R. F. D. 6, Dallas, Texas.



A breeding yard, from such matings winners will be produced. Bred and owned by J. C. Fishel & Son, Hope, Ind.



## To Make Poultry Business More Profitable With Very Little Extra Expense

put in Pigeons and breed squabs. We have our Pigeons up-stairs and chickens on ground floor, using same runs for both; we have double the amount of Pigeons in same space we have chickens. Our runs are seven feet high and enclosed with 5-8 inch chicken wire. Chickens, of course, use bottom and with six inch boards around inside, four feet from ground, which Pigeons use to get sun and air. Remember it requires a higher building than for chickens exclusively; a building 16 feet high in front and 12 feet high in back is about proper. Our squabs average us 40 to 50 cents a piece and we sell mostly all of them at Indianapolis, Philadelphia, New York and Pittsburg are the best markets for shipping squabs. We have the large Carneau Pigeons, which breed pound squabs. Carneau Pigeons, \$2.50 and \$3.50 a pair. Guaranteed mated birds. S. C. Black Minorca eggs \$2.00 per 15. If further particulars are desired regarding above, please write.

INDIANA CARNEAU PIGEON AND CHICKEN COMPANY

1540 English Avenue  
Incorporated \$20,000

INDIANAPOLIS, INDIANA

## FAIR VIEW POULTRY YARDS J. W. Gillem

Breeders and Exhibitors

Barred Rocks, Partridge Wyandottes, Light Brahmas, Black Breasted Red Game Bantams, True Fawn and White Runners, Bourbon Red Turkeys. Over 400 Premiums 1911-12-13, at Tenn. State Fair, Rome, Monterey, Atlanta, Augusta, Cookeville, Knoxville. Eggs and stock reasonable. Satisfaction guaranteed. Write for catalogue C. For quick sale 6 hens, 1 cock Black Javas, winners at Tenn. State Fair 1913, \$15.00.

FAIR VIEW POULTRY YARDS, Route 2, Box C-1, COOKEVILLE, TENN.

## MOORE'S Exhibition BARRED ROCKS

Won at Atlanta, the Madison Square Garden of the South, and in the strongest competition ever seen in the entire South, the following: 1st cock; 1st cockerel; 1st and 3rd hen; 2nd exhibition pullet; 2nd pen; 1st pen mated to produce exhibition cockerels; 1st, 2nd, 3rd and 4th cockerel-bred pullet; 1st pullet-bred cockerel; and special championship on pullet-bred cockerel. Write for mating list giving full description of our birds and their winnings.

J. R. MOORE & SONS -:- Box 76 -:- SHELBY, NORTH CAROLINA

MRS. R. B. FURMAN

MRS. MARY F. SKEENE

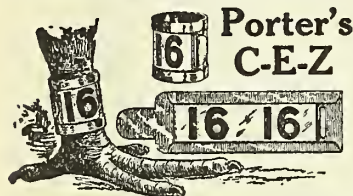
## MAPLE HILL POULTRY FARM

Breeders of the best "Giant" strain mammoth Bronze Turkeys, Ringlet Barred Plymouth Rocks and S. C. White Leghorns. Our pens are headed by blue ribbon winners exclusively, having won many ribbons and special premiums at some of the largest shows in 1911-12 and 13. Write us if you need anything in our line. Eggs and stock in season.

MEMBER AMERICAN BARRED  
PLYMOUTH ROCK CLUB.

Morristown, Tenn.

MEMBER HAMBLETON COUNTY  
POULTRY ASSOCIATION.



is the culmination of the band maker's art. It is the "last word" in big number color bands. The aluminum is of exactly the right weight and when rolled makes a stiff, strong band that will not come off, yet is not too heavy. The workmanship is perfect. The numbers are lithographed on colored Xylonite and heavily coated with liquid celluloid, thus making them absolutely waterproof, hermetically sealing the numbers and protecting them from being scratched or worn off. Try one with your knife. They come numbered from 1 to 60 in 12 colors—blue, light blue, red, pink, green, light green,

cherry, brick, yellow, light yellow, white and grey. Heavy black figures. Send ten cents for 2 pairs and be convinced. Sample for stamp. Prices, any combination of colors and numbers: 6 pair, 25c; 12 pair, 50c; 25 pair, \$1; 50 pair, \$1.50; 100 pair, \$3.00; 500 pair, \$13.00. Prices on poultry bands on request. PORTER BAND COMPANY, Porterdale, Ga.



STICK TO PURE BREEDS

**T**HIS article is not intended for the old experienced breeder or the big squab companies who are raising large quantities of squabs for market, but rather for the man or woman who keeps from a few pairs up to three or four hundred pairs of birds. To build up a large loft of thousands of pigeons, all pure bred, would take either a large initial outlay with which to purchase pure stock or one would have to wait some years to build up his stock of breeders. However, the writer's personal opinion is that this would pay in the end.

What I mean by pure breeds are birds of all one variety—or two or three varieties as to that—one is better—with no crosses. The writer's, as well as other old pigeon breeders' experience, has been that there is no dependence to be put in a cross if you expect to get squabs of even weight or breeders of even color. With a very large breeder this does not make very much difference, as he selects his squabs to market and assort them according to size. With a small breeder who expects to sell his extra birds for breeders, and culls and off colors for squabs, it makes a vital difference. For instance, if at the end of the breeding season you have twenty or thirty more pairs than you want to keep, you want to be able to advertise them as pure bred Carneau Maltese, Mondaines or Homers, or whatever breed they happen to be, and get the current price for those breeds. If you simply have pigeons for sale, it means that you are going to get practically nothing for them.

Stick to one breed; it takes a great deal less room to take care of the young of one breed than it does of half a dozen. It will give you a great

deal less trouble when the young birds are old enough to mate, as otherwise you might have Homers mating with Carneau, Carneau with Maltese or Maltese with Mondaines. All these birds will have to be caught up and be remated in separate mating coops, and if you are breeding more than one variety in a pen, the chances are they will break their matings and go back to their original mates.

### Time to Clean Up

Every smart breeder should have his loft in tip-top shape by this time. If you haven't, get busy. Clean out all the old nests thoroughly and give them a good whitewashing with about two tablespoonfuls of one of the many good disinfectants on the market added to the gallon of white-wash. This will sweeten the loft up in good shape. It has been found that pine needles make excellent nesting material. Place a box in each loft about two feet square with slanting hinged cover, having the front made of slats about one inch and a half wide, and about one inch apart and fill this box with the pine needles. This is all that is necessary. The birds can then pull the needles out from between the slats without any difficulty. It is also desirable to chop up tobacco stems about six inches long and mix with the needles. About one-third stems and two-thirds needles.

### Off Colors in Carneau

Don't be discouraged if occasionally your solid red Carneau throw squabs with white or bluish tinge on their backs close to the tail or on the rumps. They all do it. Carneau have never yet been bred up to the place where they will throw all solid red



L. H. Reade, Richmond, Va., originator of "Blue-Bar" Strain Barred Plymouth Rocks.



"The Complete Records of the 20 Best Baby Chick Raisers in America."

That's the title of a book we want to send you—FREE. It tells in an interesting way how twenty people solved the problem of raising baby chicks successfully.

These twenty live in different sections of the country and had to cope with varying conditions. Their stories are instructive therefore, as well as interesting. The book is FREE. Send for it today.

RANCOCAS POULTRY FARMS,  
Box 188C Brown's Mills, N. J.

FOR PARCEL POST AND EXPRESS SHIPMENTS

Use Rippley's Perfect Egg and Day Old Chick Boxes



Size	Doz.
15 Egg	\$1.10
30 Egg	1.85
50 Egg	2.50
100 Egg	4.00



Prices	No. 2 Carton.
500 Boxes	\$ 6.50
1000 Boxes	10.50
5000 Boxes	40.00
No. 3 Carton. 4 parti-	
tions. Made single ma-	
nilla pulp lined, chip	
board.	
500 Boxes	\$ 4.50
1000 Boxes	7.00
5000 Boxes	30.00



Perfect Chick Boxes
100 Chick Size - \$2.85 per doz.
50 Chick Size - 1.75 per doz.
25 Chick Size - 1.25 per doz.

Made of extra strong corrugated cardboard. Stand 5 men's weight. Cushion effect. Dead air cells keep out cold and heat. Chick boxes have correct ventilation. Glued tape seals boxes. Will deliver chicks or eggs 3,000 miles with safety, and eggs in hatchable condition. Satisfaction guaranteed or money returned. Put up in packages of 1 dozen. 25 cts. extra for each package broken. Sample box 25 size chick or one setting, egg 25c postpaid. Use RIPLEY'S EGG CARTONS to ship—mail—eggs to city. Your name or farm printed in 1 color. Made of strong chip cardboard. Folds flat for shipment. 30 doz. can be packed in egg case.

Catalog Free Tells all about Rippley's Boxes, Cartons, Brooder Heaters, Hovers, White-washers, Sprayers, Coops, Carts, Feed Cookers, etc. RIPLEY MFG. CO. Box U, Grafton, Ill., U.S.A.

birds. Do a little experimenting. Mate up a cock that shows some white with a hen who has a tendency to blue. In a great many cases the light color in one will counteract the dark color in the other, provided their parentage is good. Birds mated in this manner are producing some of the best red birds in the country today. However, stick to birds bred from red stock.

Some breeders, to improve the color of Carneaux, are putting in a cross of yellow to produce show stock of high, bright color. This is all right if the pedigree of each bird is carefully kept and properly remated, but it takes high skill and experience to handle this combination, otherwise your birds are likely in the end, to breed out too light.—John A. Porter, Porterdale, Ga.

A GOOD POULTRY RATION AND COST FOR ONE YEAR

A perfect ration for laying hens contains required food elements in approximately the right proportion, and in the forms most economical in the locality where the feeding is done. Professor James Dryden, head of the Poultry Department, Oregon Agricultural College, has prepared a list of five more or less exact rations for one

WRIGHT'S White ROCKS

Have won their share of ribbons and cups at the leading shows in this section for the past three years. If you want White Rocks of quality I can satisfy you. Eggs and stock for sale.

PAUL A. WRIGHT -- 653 Glenn Street -- ATLANTA, GEORGIA

EGGS For HATCHING

From winners at Dallas, Ft. Worth, St. Louis, Kansas City. Buckeyes and Buff Cochin Bantams. Pedigreed Collie Puppies. Mother of these won first at state fair. Write your wants. Satisfaction guaranteed.

MRS. H. P. HINTON -- IRVING, TEXAS



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Easiest to operate, lasts longest and you can see what you are doing. Your money back if not satisfactory. The original good marker. Plain finish 25c; nickel plated 35c.

T. W. ROGERS -- Box H -- LAMONT, IOWA

S. C. BROWN LEGHORNS AND BARRED ROCKS

S. C. Brown Leghorns, Owen strain. None better. Eggs from two fine yards \$3 per 15. Barred Plymouth Rocks, well bred and fine laying strain. Eggs \$2 per 15.

D. M. OWEN -- ATHENS, TENNESSEE

laying hen for one year. The following is ration No. 4, considered to be one of the best for most places in Oregon:

Material.	Lbs.	Cost.
Wheat.....	30	.45
Oats .....	10	.15
Bran .....	10	.12½
Corn.....	5	.10
Beef scrap.....	5	.20
Corn meal.....	5	.10
Linseed meal.....	5	.12½
Middlings .....	5	.07½
Shell .....	3	.03
Grit.....	3	.03
Charcoal.....	2	.05
Green food.....		.05

Total .....1.48½

While the cost of the above ration will vary in different seasons and at different places it is thought to be very close to the average cost. Most of the material, such as wheat, oats and corn, can be produced more cheaply on the farm, and marketed more

economically when converted into poultry products. Other material such as green food, charcoal, grit and shell or their substitutes, can be furnished from natural sources with but little cost. Often milk and other farm products can be substituted for some of the materials that otherwise would have to be bought. By a careful study of the given rations the poultryman will be able to supply the necessary food elements by substituting a more economical material. Of course the amounts should vary slightly with the difference in egg production and in size of fowls.

If it is to be conceded that the cost of maintaining a hen for one year is \$1.50 the necessity of securing better than the average six dozen egg hen is at once apparent. The yearly production of such a hen has an average value of \$1.50. The yearly production of a good layer is about twice that number; and most of the increase represents a clear profit.—Oregon Agricultural College, Corvallis, Ore.



First prize pullet at Oklahoma City. Bred and owned by W. A. Meyer, Bowling Green, Mo.



## COVERT'S QUALITY BUFF ORPINGTONS

Winners at Knoxville, Terre Haute and Indianapolis 1913-14. Grand yards mated for eggs and baby chicks. No matings held in reserve. Large, massive Buffs that are bred to lay and win. The productive qualities of my birds make them worth owning. My catalogue is free if you mention this paper. Book your orders early. Satisfaction guaranteed.

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## TURKEYS ALL SOLD

Giant Bronze Turkeys all sold. Watch for our offerings this fall. We can furnish you individuals for any show. With rich, copper bronze from head to tail. With enormous size and fine shape. Our "Hugo-King" strain has stamped quality in our flock of the very best. Our "Nugget" strain Buff Plymouth Rocks are large and fine in color, producers of the winners in almost every leading show in America. Eggs from our matings will place you in the leading winnings. Try us. Circular free.

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Box 700

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## SINGLE COMB Buff ORPINGTONS

I specialize S. C. Buff Orpingtons. 1st and 5th cockerel, Augusta show. Will furnish limited number of eggs from my 1st pen at \$5.00 per 15. Other pens, \$3.00 per 15 and \$2.00 per 15. Stock, matter of correspondence. Also Homing Pigeons.

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Box 212

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AUGUSTA, GA.



Mammoth  
Bronze

## Turkey Eggs for Sale

Do you want stock from the largest and finest in the South, from prize winners at Madison Square Garden, World's Fair, Nashville and many other great shows? Two flocks, unrelated, to select from. If so, write at once.

MRS. J. C. SHOFNER,

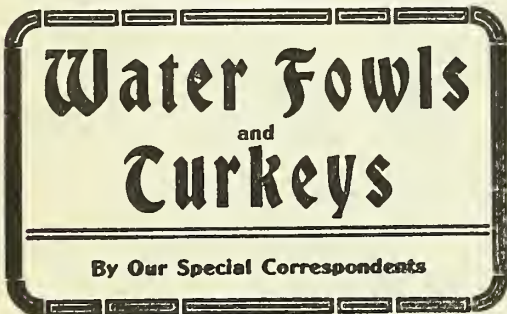
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INDIAN RUNNER

The greatest layers on earth; 300 eggs per year. Send 10 cents for beautifully illustrated booklet No. 69. Tells how to raise ducks successfully. **WOMAN'S COLLEGE**, Meridian, Miss.



## Water Fowls and Turkeys

By Our Special Correspondents

### CARE OF YOUNG TURKEYS



IT SEEMS that this has been a great problem with some people, and while some amateurs have failed, their greatest trouble has been too much care, and confinement of the young poults; also too much artificial feeding. 'Tis their nature to pick around and get their living by littles, and my plan is to follow nature's way as much as possible. I always want them mothered by a gentle, motherly turkey hen, although I set a number of eggs under chicken hens and find them splendid to hatch

them off, but do not want them to carry them, because 'tis the chicken hen's nature to wean her young and raise several litters of chicks in one season. While that is very good with their own, yet little turkeys need a mother's care to keep them from wandering off and protection from rain storms. Of course a chicken hen cares for them very well, while she is with them, and quite a number of large breeders now begun their flocks by ordering nine or a dozen turkey eggs and raising them with chicken hens, and I must say in getting eggs we get the production of the very best a breeder has raised. for every successful breeder will always keep the cream of his flock for his own breeders the following year. and when egg customers get poults from these eggs, he can raise as fine birds as the breeder he gets the eggs from. if they are properly cared for and given plenty of range to grow on.

I believe I promised in my last article to write on "Care of Young Turkeys" for April issue of The Hen, but as I have written on this subject so many times, with little changes in my plans, some readers may think a rehash so many times wears out digestion, or rather gets tired of digesting the same old food, but I think if we find by experience that a certain plan is a good one, we had better hold on to it unless we find one better. While I am aware this is an age of great improvement, there has never been

an improvement over nature, is why I say to follow nature's way in raising turkeys is the most successful. I usually set about one hundred eggs at once, to come off any time from April 20 to the last of May, but have had some wonderful birds hatched off as late as middle of June. I am more successful, however, in this climate, with poults that come off earlier than June. When hen begins to hatch, if she is nervous and seems to move about and mash her poults and eggs, I move the little ones to a basket lined with some soft warm cloth, bring them in by the fire and keep them until hatch is over and they have gained strength enough to keep from under mother's clumsy feet. After they are forty-eight hours old, I put them out in a grassy, shady plot with hen and board pen about 12x12 size, placing before them a shallow pan of water with pebbles in it to prevent them from getting their feet and bodies wet. They will see the water in between pebbles and think 'tis nature's brook. I also prepare some kind of grit for them that they may pick at this and make preparations for the food that I may give them, to grind in gizzard. Up to this time nature has provided the yolk of egg to be distributed into blood and tissues, and any food before it is dissolved deranges digestion. I now give a hard boiled egg, crumbled very fine, with a little pulverized black pepper sprinkled over it, one egg to twenty-five poults. three times a day is enough. I also chop young onion tops and lettuce with egg and pepper. They will eat a lot of this green stuff and it is fine for them. I feed this artificial food only until they are strong enough to follow mother turkey a little ramble. I then let them get insects from the weeds and grasses, feeding only twice a day a little egg, light bread or stale biscuit, softened in sweet milk. After they are a week or ten days old, I begin feeding cottage cheese once a day, which they relish very much, but too much of this cheese fattens and makes body too heavy for legs, and they take what many call leg weakness. From now on, I feed only twice a day, but add a little sprinkle of sulphur over food twice a week to tone up liver and keep off diseases. I also use a little copperas in drinking water put it in water at night and they will drink early in the morning while crop is empty and system ready to take it in and carry through every part of body. I must mention something else that is just as important as food, and



### 35 VARIETIES

Chickens, Ducks, Geese, Turkeys, O. I. C. Hogs, STOCK AND EGGS. REDUCED PRICES. Big new illustrated circular, better than ever. FREE. John E. Heatwole, Harrisonburg, Va.

## SNOWFLAKE WHITE INDIAN RUNNER DUCKS

High Grade Utility Pens - \$2.50 per 15 Eggs  
From Prize Winning Pens, \$4.00 per 15 Eggs

Mrs. E. E. ESHBACH

1402 Sturm Avenue

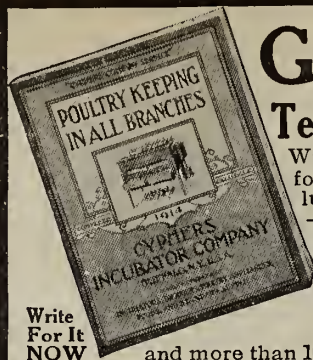
Heavy Layers ALL WHITE EGGS  
The Quality Show Winners Always

Indianapolis, Ind.



that is, keep clear of lice; it doesn't matter how much food you feed if lice are on them, to sap the blood as fast as it is fed, they will do no good. The first lice we have to contend with is the large grey head lice that seem to leave the mother hen as soon as the tender flesh is hatched out for them to bury their bills in. A little pure hog lard with a little coal-oil in it is the best thing I can find, if one doesn't use too much. I usually put about ten drops of coal-oil to a melted tablespoonful of lard, dip my finger or a little cloth in and rub little poult on top of head and under throat once a week and when they are about two weeks old, look in between wing quills for little white lice, that lie in beds close down in next to flesh, these little pests are more deceptive and damaging than the large head and neck lice. I give them a little dip of this oil and lard mixture, just before they go under mother to roost at night. In this way I get rid of the lice and they scuffle around under hen and rub grease off on her feathers before morning, coming out clear of lice and very near clear of grease. I do not like too much grease at all, for too much is worse than none at all, and do not grease in the morning for sun to blister them, or cold wind to chill them. I like about twenty-five poults to one turkey hen and when one has a large flock, two or three hens taken off at one time is best; in that way they soon all run together, and some will feed while others watch for hawks or crows and will give warning when they appear.

I failed to say that I always dust my hens in incubation with some reliable insect powder and avoid lice and mites as much as possible before hatch begins. I usually go to them once a week with dusting powder box and when they raise their feathers on back, I give box a knock and dust goes down in next to skin and lice, killing lice instantly, and yet powder doesn't get down in nest on eggs to



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## SPECIAL SALE!



### ORPINGTONS

White INDIAN  
Black  
Buff RUNNER DUCKS

White  
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### White WYANDOTTES—S. C. RHODE ISLAND REDS

In two recent shows we won thirty-six firsts and eleven specials, more than all competitors combined. Breeder, shipper and importer. Baby chicks and ducklings, 153 prizes in 4 shows. A. P. A. gold medal. Stock and eggs for sale. Fancy poultry for breeders a specialty. Write for price list No. 69.

Woman's College Poultry Farm :- Meridian, Mississippi

## CHAMPION BARRED ROCKS

I am now ready to furnish eggs that will produce the winners for 1914. At the Tennessee State Fair, September 29, to October 4, 1913, I won 1st and 2nd cock; 1st hen; 1st and 2nd cockerel; 1st pullet (6 entries); Kentucky State Fair, September, 1913—1st, 2nd, 3rd and 5th cockerel; 2nd and 5th cock; 5th hen; 2nd pen; and \$10.00 gold special for best display. This, with my win of silver cup at the International Egg Laying Contest, 1912, proves my Rocks win, lay and pay. Send for mating list of my champions. Incubator eggs a specialty \$5.00 per 100.

A. G. CALLAWAY :- R. F. D. 22 :- Box 55 :- LOUISVILLE, KENTUCKY

amount to any damage. These are my plans of raising from one to two hundred Mammoth Bronze beauties to enormous size and plumage that win for my customers in all the leading shows of North and South. I believe an amateur can raise them as well as I can, if she has the right kind of eggs to hatch from. My dear readers, my advice is, to begin with the best, even if it does cost more; you reap the benefit in the harvest. Get something you are proud of, advertise what you have in The Industrious Hen, and you will get ready sales for all your surplus stock, and can probably sell off enough to pay for eggs and have the best left for your own breeding stock for another year—Mrs. J. C. Shofner, Mulberry, Tenn.

### GUINEAS ON THE FARM

The question of keeping a few guineas on the farm is one that we do not often see mentioned in the papers. Why are not the farmers interested in having two or three of them running with the flock of fowls that he

always keeps? Guineas are beautiful birds and I always enjoy seeing a few of them with the flock of farm fowls. There are two varieties, the pearl and the white. I have never tried the white variety, but have bred the pearl and like them very well. I think they are more beautiful than the white ones.

The guinea is a very valuable bird on the farm. I claim this in that it is very useful for keeping away hawks and crows, that are often trying to prey upon young chickens. I have never been troubled to any extent with these enemies since keeping guineas. Their cries are loud and piercing and their eyes are alert and when anything else may not be aware of danger near at hand their keen eyes or ears may be the first to detect it, and they immediately make an alarm. When disturbed day or night they will always make it known. Thus they are valuable as a sort of a watch dog for other kinds of fowls. Then, too, I find they are meaty and their meat resembles wild meat and is very tender.

In my experience with them I find



A Madison Square Garden winner. Bred and owned by W. A. Meyer, Bowling Green, Mo.



# BOYD'S Single Comb BROWN LEGHORNS

Winners the past season of 12 first prizes out of a possible 15 at the three leading shows of the South in hottest competition. Eggs \$3 and \$5 per 15. A good hatch guaranteed. Order direct from this ad. and save time.

H. T. BOYD    :-    :-    SWEETWATER, TENNESSEE

## White Orpingtons of Quality

Our only breed. Farm raised, winter layers. Winners at Indianapolis, 1st hen, 1st pen, 2nd and 4th cockerel, 3rd cock, 4th pullet; sweepstakes and two silver cups, February, 1914. At Columbus, 1st and 2nd cock; 1st and 2nd hen; 1st and 2nd pullet; 1st, 2nd, 3rd and 4th cockerel; 1st pen and two silver cups. Fertility and safe delivery guaranteed. Eggs \$1.50 and \$3.00 for 15. EDGEWOOD POULTRY FARM, Rural Route No. 14, Bloomington, Indiana.

## Rose Comb REDS Exclusively

Winners North and South. 1st cock; 1st and 2nd cockerel; 1st hen; 1st pullet, Birmingham, 1914. Four prizes on six entries at February Indianapolis show. \$50 cup Muncie, Indiana, for best display. Eggs from exhibition matings \$4 per 15. Other matings \$2 per 15. Send for mating list.

C. N. NICHOLS    :-    :-    PORTLAND, INDIANA

## SINGLE COMB WHITE LEGHORNS Are the Greatest Money Makers

Our strain has been bred for 12 years for heavy laying, quick maturity and exhibition purposes. Blue ribbon winners wherever shown. 2,000 breeders. Eggs for hatching, baby chicks or breeding stock in any quantity. Satisfaction guaranteed. Reduced prices on chicks and eggs after April 20. Get our catalogue.

DENSMORE POULTRY FARM, Inc.,    ROANOKE, VIRGINIA

that they are not hard to raise. Allow the mother guinea to set and raise them if you wish, but I prefer to raise them with common hens for the reason that they become more tame. If the guinea hen is allowed to raise them she usually keeps them away from the house, and by the time they are grown they are about like wild birds, and never become tame. Reared with a guinea hen, if the weather happens to be wet, the tramping she will give them will kill a great many.

The best time to set guinea eggs is in the months of July and August. The young do better at this time because the dews are not so heavy, and another reason is that the eggs hatch just about the time grass seeds begin to ripen. As a rule guinea eggs are very fertile. They should be set on the ground in some cool, dry place, where the water will not rise under them. Care should be taken to keep the hen free from lice while she is setting, as lice or mites will kill a small guinea in a very short time.

After the guineas come off, they should be put in a good dry pen or coop. The coop should have a board bottom, for dampness is very injurious to young guineas. It is best not to feed the guineas for about 24 hours after they are hatched. I find that the best feed for them is stale bread, broiled eggs or something of this kind, crumbled fine and dampened with milk. They should be fed this kind of food four or five days, five

times a day, after which they should be gradually worked onto grains. After this they are fed practically the same as little chicks.

The most critical time in a young guinea's life is when it begins to send out wing feathers. Especial care should be taken not to let it get wet at this time. Do not overfeed and watch for the lice and mites, which are very destructive to them.

The young guineas are very lively and grow rapidly. For the first few days they should be kept yarded, but after they become strong and spry they may be allowed their freedom with the mother hen. Usually, after



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the hen weans them, they fly into some nearby tree to roost. After this they will pick up most of their living on grass, seeds and bugs.

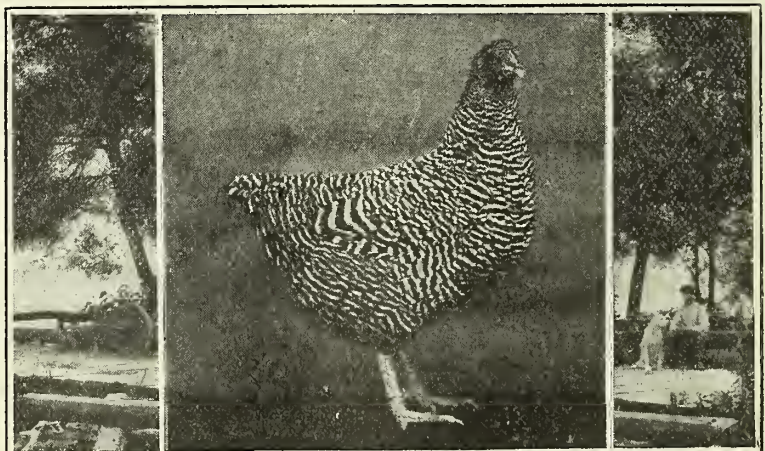
During the winter they require about the same care as a common fowl. They do not lay in winter but usually begin about the middle of April or the fore part of May, and will lay persistently from then until well into November. Guineas may live to be several years of age, but are not of as much profit after the second or third year. Their eggs can readily be sold at a good price, and for a market fowl they bring big prices in cities.

Every farmer should have at least a pair of guineas and I think if once tried, you will always keep a pair with your other fowls.—Kimball's Dairyman.

Have regular hours for feeding your poultry. Irregular feeding often causes a derangement of the digestive organs, and this means impaired health and fewer eggs.

## DOUBLE-YOLK EGGS.

When double-yolk eggs are found among those collected, it is considered a cause for congratulation, the hens being supposed to have performed extra work. But the fact is that double-yolk eggs indicate that the hens are too fat. The eggs are really abnormal, and it will be but a short time before the hens will cease laying; hence while a few extra large eggs will be obtained for a short time, the result will be none at all later on. As soon as the hens begin to lay double-yolk eggs shut off the grain and reduce the food so as to bring them into more favorable condition for laying.—Ex.



Letta II, a "Blue-Bar" pullet of wonderful quality. From an un-retouched photograph. Bred and owned by L. H. Reade, Highland Park, Richmond, Va.



# Poultry Disease Department

By J. A. THORNHILL, Hartselle, Alabama

## POULTRY DISEASES

The following bulletins will be sent free to any resident of the United States on application to the secretary of agriculture, U. S. Department of Agriculture, Washington, D. C.:

530—Important Poultry Diseases.

287—Poultry Management.

528—Hints on Poultry Raising.

Order by number.

## TUBERCULOSIS IN FARM POULTRY

Tuberculosis is to some extent prevalent here and there among the poultry flocks of Iowa. That has been brought out in the examination of birds, or their tissues, brought or sent for diagnosis to the veterinary laboratory of the Iowa Agricultural Experiment Station. From November 1, 1909, to June 30, 1912, the laboratory examined the tissues of seventy-three birds, two of which, or 2.7 per cent, were found to be affected with tuberculosis. From July 1, 1912, to June 17, 1913, sixty-nine birds were examined and it was found that in eighteen, or 26 per cent, tuberculosis was the cause of sickness or death. These birds or tissues came from many different flocks in various parts of the state.

Tuberculosis is a specific infectious disease caused by a bacterium known as the *Bacillus tuberculosis*. It shows itself in poultry by the development of yellowish-white nodules. These are found principally in the liver, spleen, kidneys, mesentery and wall of the intestines, although lesions may appear in other parts, joints, skin, etc. Small inflammatory nodules, somewhat resembling tuberculosis, may be

# Egg Producing Powder

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An old man has been supplying the Chicago market with the "Great Western" Poultry Food. He made it himself and made a fortune. I discovered his SECRET RECIPE and will send you a printed copy of it for 10 cents. This recipe tells how to make a first-class Poultry Food and Egg Producer at about 6 cents per package. Guaranteed.

J. J. Shellzok Formulary

Cambridge Building

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A HOME MACHINE FOR THE HOME FOLKS  
MADE TO SUIT THE CONDITIONS IN THE SOUTH

Manufactured by

# Southern States Incubator and Brooder Company

COLLEGE PARK, GEORGIA.

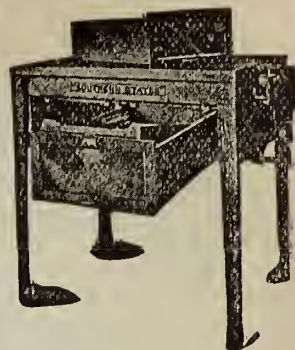
A Machine that is hatching big per cent of Ducks and Chickens. It is absolutely free from smoking or catching on fire.

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There is no machine on the market today better in any way than this machine. Made from the best of natural oak grown in Georgia; highly polished, it is a substantial and beautiful piece of furniture. All inside heating equipment made from best grade of copper.

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ORNAMENTAL QUALITIES  
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Write for our catalogue, describing fully each machine and brooder, with prices. Don't buy until you have investigated our machine.



# WHITE WYANDOTTES

Have a number of exceptionally fine cocks, hens and pullets that I will sell at bargains for quick buyers. Will sell my New York, Atlanta, Savannah and Columbia winners. If you want some of the best blood in America write me at once stating what you want, and I will make you price to suit. Remember my birds have won from New York to Atlanta in awful strong competition. No cockerels left.

T. L. LITTLE

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Box No. 534

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CAMDEN, S. C.

# FLETCHER'S Buff ROCKS

ALWAYS WINNERS, won at Chattanooga show 1st cock; 1st cockerel; 1st, 2nd pullet; 2nd, 3rd hen; 1st pen. Stock and eggs for sale. Eggs, \$2.00, \$3.00, \$5.00 per setting, \$10.00 per hundred.

JNO. G. FLETCHER

--

404 Vance Avenue

--

CHATTANOOGA, TENN.

caused by other forms of bacteria, animal parasites or lifeless irritating substances, but the true tubercle is caused only by the bacillus of tuberculosis; unless the particular organisms can be found, the disease should not be classed as tuberculosis.

The bacterium which causes tuberculosis in poultry (*Bacillus tuberculosis avium*) is a small, slender rod, slightly curved, with round ends and, according to the author's observations, shows a marked beaded appearance, especially in stained smears from diseased tissues. While this is the specific cause of tuberculosis in fowls, there are many predisposing factors that often have a very important bearing on the spread and course of the disease. Among the causes which encourage the disease but which may be controlled are overcrowding, bad ventilation, confinement in damp houses, exposure to cold and storms, general unhygienic surroundings and spoiled foods. Infection of healthy fowls probably takes place most often from contaminated food, water and air, by which means the organisms gain entrance to the alimentary tract and respiratory passages.

Symptoms.—Many of the birds examined were dead before they reached the laboratory. Close observations were made, however, in the case of eleven living birds which ultimately died, or were killed, and found to be

tuberculosis. The symptoms here given as more or less typical of the disease are largely based on these observations.

The symptoms which a bird presents depend somewhat upon the location and seat of the disease. When the internal organs are the parts particularly involved, there is a loss of flesh that comes on gradually, leading to marked thinness and a paleness of the comb, wattles and the visible mucous membrane. There is the general appearance of anaemia or weakness, and an examination of the blood will show a reduction in the number of red blood corpuscles. As the disease progresses, the feathers become ruffled, the bird separates itself from the flock and diarrhoea sets in, producing weakness even to the point of prostration. At first the appetite is good, but later the birds refuse to eat.

When the disease involves the joints there is swelling and lameness. These

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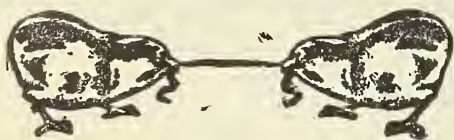
Do away with the bother by using Succulenta Tablets

They are better and cheaper and more relished by all fowl. Simply dissolve one tablet in one quart drinking water for fowl. Sample can (100 large tablets) by mail.

.75. Can of 250 large tablets by mail \$1.50. YOUR MONEY BACK IF NOT SATISFIED. Drop postal for particulars to The Succulenta Co., P. O. Box 405-25, Newark, N. J.



## CHICK-A-DEE FARM S. C. WHITE LEGHORNS



produces the high record laying pullets.  
can be bought at prices that any farmer or breeder can reach.

For 16 years I have bred this breed for prolificness, trueness of type and vigor, and won my share of ribbons at best shows. I have 4 pens mated under the direction of C. A. Wilson, Professor of Animal Husbandry, Experiment Station of Tennessee, being especially bred to find the male bird that Have other pens equally as good and eggs

J. A. DINWIDDIE :- R. No. 3 :- NEW MARKET, EAST TENN.

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POWELL STATION, TENN.

swollen areas around the joints may rupture and discharge a thick, yellowish material that contains many organisms. The wings when involved drop low and often drag on the ground when the bird walks. Such cases are not uncommon in pigeons, wings dragging, joints swollen, many of them rupturing, and infected material constantly discharging from the ulcerous surface. The first noticeable symptoms in such cases will be the inability to fly.

If the lungs and air passages are involved there is usually difficult breathing which is brought to the attention of the owner or attendant by a wheezing or rattling sound. In such cases there is usually a discharge of a thin, slightly stained material from the nose and mouth.

If the lesions are located on the skin, they are usually in the form of

round, elevated nodules covered with a thick horny growth. If these rupture they appear much the same as the ruptured areas around the joints. About the mouth, eyes, nasal passages and cavities of the head the disease takes on various forms and may easily be confused with or mistaken for roup. The temperature usually remains about normal.

### Anatomical Changes

The changes found in the tissues of birds dead from tuberculosis are for the most part small, yellowish nodules or tubercles. The liver is the organ most frequently involved. The nodules vary from very small ones just visible to the naked eye to those of the size of a large pea. They are usually separate, although in rare cases two or three may be united, forming irregular areas. The nodules in the liver are made up of a soft, semi-solid or cheesy dead, or necrotic, center surrounded by a dense connective tissue capsule. This capsule is composed of newly formed tissue, and is produced in a protective way in that it tends to hold the tuberculosis organisms in a confined space and prevents, in a large measure, their spread to other parts. The nodules are easily separated from the surrounding tissue, a condition which distinguishes them from other diseased areas having a similar appearance, but a different cause. The liver is usually enlarged. Its capsule may rupture, followed by hemorrhage into the peritoneal cavity, causing sudden death.

The lesions in the spleen and kidney resemble very closely those of the liver.

In the mesentery, the membranes which connect the intestines with the back wall of the abdomen, the diseased areas vary from acute inflammatory nodules of a flesh color to those that have a narcotic center, surrounded by a capsule of connective tissue. The center may be semi-fluid, cheesy or hardened in character. The older lesions are of a decided yellowish color and usually hardened or calcified. The nodules are usually more numerous in that part of the mesentery next to the intestines.

In the intestine the early development of the nodules seems to be just beneath the outer covering, at which time they are very small. As they develop the capsule becomes thick and the necrotic content is comparatively small in amount. There is a tendency for an opening to form leading into the passage way of the intestines through which material from the nodules may be discharged. These nodules may occur throughout the length of the intestines.

The lesions on the skin vary from small to large nodules that generally grow outward, seldom involving to any extent the underlying structures. These skin lesions are usually free from feathers and have a thick, horny surface. In the large, older nodules there are very likely to be found a number of necrotic centers separated by dense bands of connective tissue. If these nodules rupture, as they often do, there is thrown off a sticky, yellowish material, that contains many organisms.

Among the fowls examined in the veterinary laboratories, the lungs were seldom affected. When they are involved it is usually with the formation of the characteristic nodules. In one big flock the only recognizable lesion found was in the trachea; this consisted of a discharge into the trachea. The material was rather firmly attached to the lining membrane, was fibrous in character, of a reddish color and showed upon microscopic examination an innumerable number of the bacilli. For a short distance over the involved area the rings of the trachea were, in every instance, of a light color, dry and very brittle. Other parts of the trachea and the lungs were usually red and

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"I'M LAYING"

Disease Paralyzes the crop (totally or partially). Why pour medicines into a "paralyzed crop," there to lie dormant, while disease destroys?

### GET OCULUM AND INJECT

It, and Cholera, Roup, W. Diarrhea, Black-head and Leg Weakness will "get out and stay out."

"You have opened a gold mine for the chicken man." J. S. Hendry, Louisville, Ky. Dealers, 50c. and \$1. If skeptical (doubtless you are), dime (postage), brings either size. Send bal. if O. K. Agents needed. Literature free. Your move next.

H. I. CO., Box M, Salem, Va.



congested. In all of the birds so effected there was a discharge from the nose and mouth.

Tuberculosis in the cavities of the head causes bulging of the affected parts.

In the joints, aside from the enlargements and possible discharge, there may be found on the membrane that lines the joint cavity the development of a rather delicate fibrous exudate. Later, the joint cavity may become filled with a cheesy, tubercular material. The lining membrane breaks down, the joint surfaces become rough and the destroyed elements are loose in the joint cavity.

Other organs that are less frequently involved are the ovaries, the heart and its membranes and the bones, in fact no organ is exempt.

#### Mode of Infection

Birds suffering with tuberculosis may discharge the bacilli with their droppings, from open lesions on the skin, or from the nose and mouth. Coming from these parts the organisms are scattered in the yard, scratching pens, houses, roosts, and nests, and can easily find their way into the food and water or receptacles used for feeding and watering. From these they may readily gain entrance to the intestinal canal, from which, under favorable circumstances, they pass into the circulation and are carried to the various organs of the body. The organisms may gain entrance to the respiratory system. This is especially possible when the birds are closely confined in houses that are dusty.

On a squab farm started in 1905 with mostly young birds the disease soon began to appear in isolated cases. Recently, the plant was carrying 12,000 breeders and the loss will probably aggregate 1,000 birds a year from tuberculosis alone, the greatest number of cases occurring in the old birds and in the old habitations. In a flock of about 500 hens there was for several years a gradually increasing loss of birds, supposedly from roup, totaling during the last year 15 per cent of the flock. A careful investigation demonstrated that tuberculosis, not roup, was the cause of death.

While the most common source of infection is from sick to healthy fowls either directly or indirectly, experimental evidence shows that there is a possibility that fowls may become infected with tuberculosis from following cattle and hogs that are suffering with the disease and discharging the bacilli with the faeces; from eating the sputum of tuberculous people, milk that contains the organisms, or the carcasses of animals that have died of tuberculosis and which are so often fed to other farm animals.

Experiments have shown that it is possible for the bacilli to be transmitted through the egg to the young chick. This, however, is not common and probably takes place only when a lesion exists in the ovary, or possibly when the individual is suffering with advanced generalized tuberculosis. Chicks hatched from infected eggs

## Buff ORPINGTON Cockerels \$5

From as fine a pen of Buffs as there is in Tennessee and direct from Cook. Eggs, \$1.00 for 15. Breeders of Buff and White Orpingtons and White African Guineas.

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First prize winners, season 1914, New York, Boston, Chicago. Won more first prizes on Blue Orpingtons at above shows than the rest of the breeders of the United States and England combined who exhibited at the above shows.

HALDIE NICHOLSON

-:-

LEOMINSTER, MASS.

## FRAIN'S BLACK and WHITE ORPINGTONS

Our winnings at Augusta Show on Blacks: 1st hen; 3rd pullet; 3rd cock; 3rd, 4th, 5th cockerel. A lot of Black cockerels for sale. Whites: 4th and 5th hen at Columbus, Ga. Blacks: 1st hen; 1st and 5th cockerel; also the best bird in the show; 2 special \$10.00 in gold and 2 silver cups. Whites: 4th cockerel. Eggs, \$3.00, \$5.00 and \$10.00 per setting; utility stock eggs, \$10.00 per 100. Agents for Cyphers Incubators and Supplies.

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## BLUE AND WHITE POULTRY YARDS

Blue Wyandottes, Blue Leghorns—EGGS—White Wyandottes, White Leghorns. from all Blue Ribbon White Wyandottes \$5.00 per 15. Other pens \$3.00 per 15. Blue Wyandottes, \$5.00 per 15. Blue Leghorns, \$3.00 and \$5.00 per 15. I won at Columbus, Ga., Nov. 1913, on Blue Wyandottes, 1st pen. Blue Leghorns, 1, 2, 3, pen; 1, 2, hen; 1, 2 cock; 1st cockerel; \$5.00 special for best display. White Wyandottes, 3, 4, 5 pen; 4 hen; 5 cock. The Geo. Hamburger geld and silver cup for best pen by lady exhibitor. My White Wyandottes won 1st pen at Atlanta, S. I. P. A. show 1911, also 1st pen 1912, different birds. Single entry, 3rd hen; 5th cock. Every bird in my pens prize winners. A few trios Blue Leghorns, \$15.00 trio; yearling stock. Satisfaction guaranteed. Life Member A. P. A. I won at Florida Fanciers' Association Show this winter, White Wyandottes 1st pen; Blue Wyandottes, 1st pen; Blue Leghorns, 1st pen. Address MRS. C. A. BULLOCH, Bullochville, Georgia.

never reach maturity, usually dying within the first three months. (Maffucci) (Mohler and Washburn) (Lichtenstim) and (Robinswitsch).

#### Prevention.

As the administration of medicines will not give results and is therefore useless, all efforts should be to prevent the introduction of the disease into healthy flocks and to check its spread in flocks where it already exists. If flocks are known to be free from tuberculosis they should be kept from other farm animals that may be suffering with the disease and from eating the flesh of animals so affected. Birds or eggs for hatching should not be purchased from flocks that are not known to be free from tuberculosis.

After the disease is known to exist, the whole flock must be disposed of or the disease must be eradicated.

If the entire flock is to be killed, the carcasses of all the birds badly affected should be destroyed by burning. Those that are still in good flesh, although suffering from a mild or localized form of the disease, may be utilized for food.

To eradicate, some radical and per-

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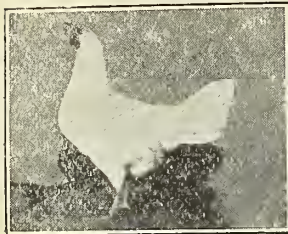
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sistent steps are necessary. All birds showing symptoms of tuberculosis should be killed and burned. New quarters and yards should be furnished if possible and the old houses burned and yards ploughed up and



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and have 57 magnificent matings from which to fill your order. For years and years Peerless strain White Leghorns have stood foremost as layers of large, uniform, white shelled eggs. They are known universally for their large size, and they have been carefully crossed with America's finest exhibition strains to perfect standard points. In-breeding is unknown on this plant. We have big, strong birds that both lay and win. Send for big free mating list which shows many winners at Chicago, Kansas City, Denver, Detroit and Omaha, just as the birds really are. This booklet also contains much valuable information on feeding, housing, etc. The quality I am furnishing in eggs this season should interest every breeder, large or small, and my prices are 25 to 200 per cent lower than any others—made possible by minimum operating and selling expense, coupled with large production. SPECIAL: I have twelve pens headed by males imported from Tom Barron, whose Leghorns are the English champion layers.

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## Partridge ROCKS

Direct from the originator of this variety. Fowls, either cocks, hens, cockerels or pullets of grand breeding or show quality, from the greatest blood lines of the breed ever known at reasonable prices considering quality. Satisfaction guaranteed.

Eggs, from forty of the grandest matings ever made of this variety, strictly fresh and tested for fertility. Send for mating list describing these pens and explaining my great offer of Gold Medal to purchasers of eggs from me this season. Every infertile egg can be returned and will be replaced. Remember fowls in these pens have been winners at Chicago, New York, Cincinnati, Kansas City, Indianapolis, Topeka, and other leading shows and that catalogue is free for the asking. Come to the fountain head.

**S. A. NOFTZGER,** N. Manchester, Indiana  
Originator of the Partridge Rock Fowl.

seeded. If the houses are permanent and valuable, then all loose fixtures should be removed and destroyed, the houses treated with a strong disinfectant and then whitewashed. All loose dirt in the houses and yards should be scraped off and treated with some antiseptic solution. Droppings from roosts should be removed daily and sprinkled with a 2 per cent solution of sulphuric acid. All water and food should come from sources that are known to be free from contamination and the receptacles used for water should be cleaned daily. If it appears that there is a large number of birds affected it is advisable to purchase eggs for hatching from a sound flock. However, if the birds are

valuable and it is especially desired to build up a flock from this stock, there would be little danger of transmission through the eggs.

The system of housing in small colonies greatly aids in the control of this as in any other infectious disease.

### Diagnosis

The diagnosis of tuberculosis in poultry by observing the symptoms may be possible in some typical cases. In a majority of cases, a diagnosis may be made from a study of the gross or visible part of the tissue changes found upon post mortem examination. A positive diagnosis rests with the finding of the *Bacillus tuberculosis avium* in microscopic preparations made directly from the lesion in the organs or tissues of birds that were suffering with the disease.

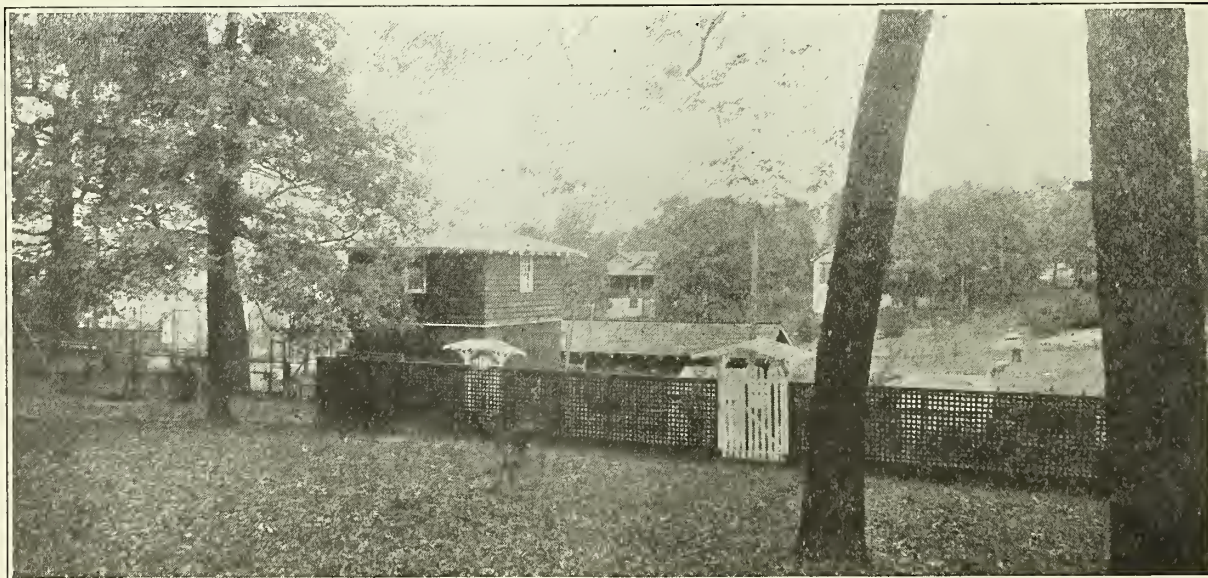
Some of the diseases and tissue changes which must be distinguished from tuberculosis are chronic cases of chicken cholera where there is lameness. Birds are not uncommonly lame from joint rheumatism, exposure to cold, gout and sore feet. In birds dead from cholera there are often yellowish white spots and areas of degeneration on the liver. Areas of fatty degeneration, local areas of necrosis and abscess formation which are due to various causes and which stand out as prominent discolored spots, may be the inexperienced be mistaken for tuberculosis.

Tumors of the liver, which are usually of the lymphoma or sarcoma variety, may also be confused with tuberculosis. In some cases the development of the tumor is uniform throughout the substance of the liver, making

the organ several times its normal size, and giving it a mottled appearance. In other instances, tumors appear as yellowish white, firm, slightly elevated, circumscribed masses of newly formed tissue, usually larger than tubercular nodules.

Tuberculosis of the cavities of the head must be distinguished from chronic roup. Tumors of the skin, encysted parasites (*Laminosioptes cysticola*) that are so frequently found in the subcutaneous tissue of fowls, the disease known as "Going light" or as thenia, paralysis in chickens and Heterakiasis are not to be confused with tuberculosis. In paralysis in chickens there would be the absence of the swelling about the joints. Heterakiasis is a disease characterized by extreme wasting of the muscles, caused by a round worm that lives in the caeca or blind gut. Birds harboring the air sac mite (*Cytodites nudas*) and birds showing general unthriftiness may also in some cases be mistaken as tubercular.

When one stops to consider the seriousness of tuberculosis in farm animals, the possibility of its spread from one species of animals to another, the indirect danger to humans, the great economic importance of having flocks and herds free from disease and the possibility of mistaking other morbid conditions for those of tuberculosis, a positive diagnosis always seems advisable. This can be done by finding the *Bacillus tuberculosis avium* in microscopic preparations made from the lesions, by animal inoculations and usually from a careful study of the gross and histological structure of the nodules.—W. W. Dimock.



Partial view of pens, showing open front colony houses used on the plant of O. B. Andrews, Chattanooga, Tenn.



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White**LEGHORNS**

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**PARK VIEW POULTRY YARDS**H. A. WARING  
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Editor Industrious Hen: I have often seen the question, "How to get rid of lice?" Many remedies are given, but never one that I used with success. Some years ago, I was then living in Clermont county, Ohio, where a good deal of tobacco is raised. I filled a barrel about two-thirds full of water, into this I put a lot of tobacco stalks from which the leaves had been stripped, in two or three weeks the water had become strongly impregnated with the tobacco; with that water I thoroughly drenched the whole inside of my hen house, which had become quite lousy. That settled the lice. I also used tobacco in the nests, and was not troubled with lice again, as I repeated the dose occasionally.—S. T. Carley, Pierceville, Ind.

**LICE AND MITES****Spraying for Mites.**

Lice and mites are the cause of a great many poultry troubles. The mites stay on the hens at night, but during the day are found in the filth and dirt around in the cracks and crevices of the poultry house or place where the hens may roost. Continued spraying with a good coal tar spray (there are a number of good kinds on the market) will rid the house of these troublesome pests. First clean up good, then spray very thoroughly. Wet down everything, particularly around the roosting places. Repeat this spraying in from four to seven days, then spray a third time four to seven days after the second spraying. The first spraying gets the adult mites while the second and third spraying will get the eggs which hatch afterwards, and which the first spraying does not affect. Often failure to get rid of mites in a house is laid to the spray material when the trouble is either that too little was applied to do a thorough job, or that only one spraying was given, and all the mite-eggs were not killed.

**Killing Lice.**

Lice, of which there are several kind stay on the hens' bodies most of the time, and therefore are not killed by spraying the henhouse or roosting place of the flock. They can best be killed by either dipping the fowl affected in a good stock dip, or by a thorough dusting with good lice powder. The dipping is a good way in warm weather when there is no dan-

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BUFF Plymouth**ROCKS AND WHITE****WYANDOTTES**

The best in the South. Booking eggs now. Rocks, 1st pen, \$5; 2nd pen, \$3; 3rd and 4th, \$1.50 per 15. White Wyandottes, 1st pen, \$5; 2nd pen, \$3 per 15. Write your wants.

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**SPARTANBURG, SOUTH CAROLINA****SINGLE COMB****BUFF LEGHORNS**

If interested in Buff Leghorns, write for my 1914 catalogue, containing matings, prices and list of winnings at such shows as Chicago, Nashville, Augusta, Atlanta and Knoxville and compare with any breeder in the South. Excellent breeding females, \$1.50 each; males \$2.00 and \$3.00. Better prices on 10 or more. Eggs from two all prize matings headed by Chicago winners, \$3.00 per 15. Pens headed by Nashville and Augusta winners, \$2.00 and \$1.00 per 15; \$5.00 per 100. If eggs are to be sent by parcel post, postage will be paid on pens 1, 2, 3 and 4. **DR. E. S. LANDESS, Fayetteville, Tennessee.**

ger of the bird catching cold. The powder method is easier and good if a strong, fresh powder is used. Pyrethrum (Persian) insect powder is one of the best, but is rather expensive. Many of the cheaper powders are mostly tobacco dust, and are good if fresh. Below is given the formula for a very efficient lice powder which can be made at home for from five to ten cents a pound, depending on the local price of the drugs:

**Lawry Lice Powder.**

3 parts gasoline.

1 part 90-95 per cent strength crude carbolic acid.

Add the acid to the gasoline, mixing thoroughly. Then stir in enough plaster of paris to take up the moisture, making a dry, pinkish-brown powder with a strong carbolic odor. If kept in a covered can this powder will keep for a long time.

Note. The Maine Experiment Station recommends that in case at least 90 per cent carbolic acid cannot be obtained that cresol be substituted for the acid. The formula then would be:

3 parts gasoline.

1 part cresol.

Plaster of paris to take up all the moisture.

Either formula can be easily made and will give good results if thoroughly applied.—Bulletin No. 2, Georgia State College of Agriculture.

Don't use closed coops or closed growing houses. Keep the front open and protect against marauders with fine mesh wire netting. Don't crowd the sleeping quarters and be sure to keep them clean.

**RHODE ISLAND WHITES**

The Rhode Island Whites were originated in Rhode Island several years ago, not by a farmer, but by a practical market poultryman, a man who could see his profits double from his broiler, frier and egg trade could he only transmit the great laying qualities of the best laying breeds with the quick maturing qualities of others to one breed of good size.

He was not a man to sit idly by and wait for luck to come his way. With energy, coupled with good judgment, he set about to procure the breed which would better supply his demands. He selected the Partridge Cochin as the best of the larger breeds. He crossed these females with a White Wyandotte male. The pullets proved such quick growers and good layers that he felt encouraged to try them out. He mated them to a Cochin male because the Cochin blood had always proved most profitable to his business. Still well pleased with the outcome, but wanting a white bird, as they are easiest bred to color, produce the best appearance and thus command the highest price on the market, also wishing to cap the climax as an egg producer, he mated his pullets to a Rose Comb White Leghorn. From this last cross he selected the pure white birds and after the second season decided fully he had what he was looking for and discarded all other breeds—just like everyone else is doing after giving them a trial.

This man, as I said, was no fancier; he had what he wanted and was satisfied in the possession. It seems



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the world's greatest layers. Stock and eggs. Write for mating list.

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## LONG'S Silver WYANDOTTES

If you want the best in stock and eggs, send for mating list. POPE M. LONG, Cordova, Ala.

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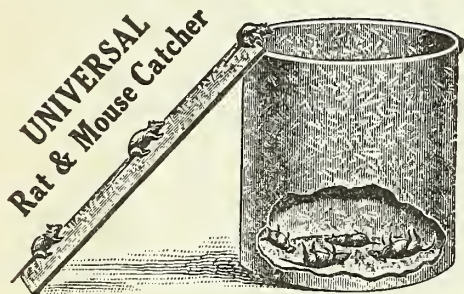
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## S. C. White LEGHORNS

We have about the same number of pullets this year as last, but are getting about 15 per cent better laying. Some improvement isn't it? Price \$1.50 per 15; \$8.00 per 100.

**ENGERT POULTRY FARM** :- Station C :- CHATTANOOGA, TENN.



Cleans a building of Rats and Mice in short time, keeps it cleaned, for it is always ready for use. Made of galvanized iron, can't get out of order, lasts for years. Large number can be caught daily. Go to Catcher mornings, remove device inside, which only takes few seconds, take out dead rats and mice, replace device, it is ready for another catch. Small piece cheese is used, doing away with poisons. Catcher is 18 inches high, 10 inches diameter. When rats pass device they die, no marks left on them. Catcher is always clean. One of these Catchers set in a livery stable in Scranton, Pa., caught over 100 rats in a month. One sent prepaid to any place in United States upon receipt of \$3. Catcher, 8 in. high, for mice only, prepaid \$1. On account of shipping charges being prepaid, remittance is requested with order. H. D. SWARTS, Inventor and Manufacturer, Scranton, Pa.

that it never occurred to him that many others were looking for this same breed but had not been so fortunate as he in finding it. For this reason the public knew nothing of it until a few years ago.

When the writer began breeding them she could find but four breeders; now they number by the hundreds.

The Rhode Island Whites are very hardy, thrifty and quick-maturing. As layers they are unexcelled. We have them in our yard that have laid over 40 eggs before seven months old. In beauty they equal the White Wyandotte, but are of a more business type. They are well suited to farmer backyard poultry breeder, market-poultryman or fancier.

The Rhode Island White Club was

organized February 8, 1912, at Indianapolis, Indiana. Less than two years since organization, but it has 200 members, representing 38 states and Canada.

The club adopted as its standard the same as required for Rhode Island Reds, excepting the color of plumage, which must be pure white throughout.

The club offers handsome ribbons at all shows where the secretaries will publish the offer in their catalogue. State cups are offered to all states having ten members in good standing.

Through the efforts of the club these birds are being exhibited and advertised all over the country. The demand, which has always been greater than the supply, is constantly increasing and we see nothing in the way of a great future for them. They are rapidly gaining popularity in the poultry world. Reports are coming from all over the country of their winnings, not only in classes of Rhode Island Whites, but in sweepstakes over all varieties. Last fall a pen of April hatched R. I. Whites won an "open-to-the-world" sweepstake prize, seventeen varieties competing.

It is evident that the next boom in the poultry world will be enjoyed by the practical, money-making, hardy, vigorous kind—the Rhode Island Whites.

### Merits of the Rhode Island Whites

To the correspondent from Taunton, Mass., who asks the merits of the Rhode Island Whites, I wish to say: That, having served as secretary of the Rhode Island White Club ever since it was organized, I am sure there is not another person in closer touch with more breeders of this variety than I am. And with the editor's permission I shall give, as briefly

as I can, not merely my opinion, but that of the breeders in general.

The Rhode Island Whites are generally conceded by all who have tried them to be the best utility or all-purpose fowl in existence. In make-up they are three-eighths Cochin, one-eighth Wyandotte and one-half Leghorn, and they seem to combine the best qualities of all three of these valuable breeds. They are very hardy, thrifty and mature quicker than any other breed of their size which is the same as the R. I. Reds. As layers they surpass any other breed. They seem to combine the laying qualities of all their ancestors and lay winter and summer.

Utility qualities are not their only possession. There is not a more beautiful bird known to the American Standard of Perfection than the Rhode Island White.—Mrs. C. M. Vertrees, Cecilia, Ky., in American Poultry Advocate.

### THE DRY MASH RATION

The statement has been made that ninety per cent. of the essentials for success in the poultry business are dependent upon the method of feeding used and the varieties of food given the fowls. This is not far from being a correct statement.

Foods and the elements which they contain have a greater influence upon life than most people imagine. A certain amount of solids and a certain amount of liquids are required to maintain health in any body. For instance, in mammals which include the human family, animals of nearly every description and fowls in the broader classification, eighty per cent of water is required in the system to maintain normal health.

When we examine the body of a hen we find that eighty per cent is water. When we examine an egg we find that 82 per cent of the composition of the egg is water. The remainder is composed of solids.

As small as the amount of solids in the body of the hen is, it is really the controlling factor of the health of the fowl. This may not seem to be logical in reasoning, but it is true and the statement is backed by numerous experiments.

The nourishment of the body is supplied from the elements making up the solid portion of the body. That is, the essential elements are supplied from that source. While water is a very great essential, it can easily be supplied the fowls and does not need any great consideration, but supplying the elements making the solids in the system of the fowl is highly important.

The feeding of mashes to poultry has been in use for some time, but it has not been generally adopted, especially among the farmers. There are several reasons for this, the chief one being that it is comparatively new and has not had time to be introduced in every locality.

The principle upon which mash feeding is based is a very simple one. The principle recognizes the great influ-



ence of solids upon the health of the fowl and attempts to supply that element in a manner that is not only highly beneficial but also economical.

Generally speaking, the mash ration supplies the hens with a balanced ration and in such a manner that they must eat a balanced ration or not eat at all. Many people think that when they mix grains together so that they form a balanced ration and feed it in that form that the hens eat a balanced ration. Such, however, is not always the case.

An individual hen may have a great liking for corn. She will dig through the litter and will eat only the corn, leaving the other grains for other hens to eat. Is this eating a balanced ration? Yet it is true that the poultryman is entirely innocent, having fed a balanced ration.

Feeding solids through the form of mashes does away with this danger. The grains are all mixed together so as to constitute a balanced ration. The mixture is then ground up into fine particles and fed in that state. The hen cannot eat just those grains or foods that especially appeal to her, but must eat the whole mixture or starve. This is the only system of feeding in which the poultryman can be actually certain of feeding and making the hens eat a balanced ration.

The saving from waste when the mash system of feeding is used is tremendous. Few people really realize how wasteful the poultry can be when given half an opportunity. There are patented hoppers on the market today that are not only waste proof in that they prevent the fowl scratching out the mash, but that are also rat and mouse proof. This in itself should be sufficient to induce every poultryman to adopt the mash system of feeding.

Then the saving of time and labor required to care and feed the fowls is an important item. In fact the large poultry farms could not carry on their work at a profit but for the mash system of feeding, which, statistics show, have all adopted this system of feeding.

A hopper need be filled only as it becomes empty. It is not necessary

## SPAIN'S Barred ROCKS MAMMOTH Bronze TURKEYS

I have nine pens of birds mated up that are headed by the champion cockerel of Virginia and 1st and 2nd pullet bred males of the state, and 1st pullet bred cock at Baltimore show with several sons of that wonderful pullet bred cockerel last year, "Sensation." They are mated to nothing but the very best of my prize winner females. If you want something to produce winners for next fall fairs and shows, get some eggs from these matings. They are very reasonable, for I want them in reach of all people interested in thoroughbred poultry. Eggs, \$2 to \$5 per 15. I have a limited number of M. B. Turkey eggs from flocks headed by 3rd prize tom, Baltimore show, weighing 40 lbs, and 1st prize young tom at Baltimore and which was so much admired for his grand markings. Eggs 50c and 75c apiece. Stock always for sale. Write for mating list and winning sheet. Fertility of eggs running 85 to 90 per cent.

E. C. SPAIN, R. F. D. No. 2, CHURCH ROAD, VIRGINIA

## Wardin's Barred ROCKS, Swift's S. C. Brown LEGHORNS

Eggs \$1.50 per setting 15; \$2.75 for 30. Special pen Barred Plymouth Rocks, eggs \$3.00 per 15. This yard headed by a cockerel we purchased from Mr. Spaugh, the Barred Rock specialist. He said "his breeding is best I have ever bred; his dam was first Indianapolis hen 1911, a grand hen; large and well barred and colored." (This yard mated to produce exhibition pullets). Owing to the large demand we had for baby chicks last month, in order to reserve enough for ourselves, we will not have any for sale this month. We guarantee safe delivery and a satisfactory hatch of eggs. Our yards contain prize winners at Baltimore, Md., Atlanta, and elsewhere. Mating list free.

G. & G. POULTRY YARDS, L. C. Glover, Prop., Johns Island, S. C.

## ANCONAS

Winners Madison Square Garden, Philadelphia, Baltimore, Atlanta and elsewhere.

Exceptional values in show and utility stock.

Birds warranted to WIN!

H. E. PORTRUM  
Rogersville, Tenn.

to visit the fowls three or four times a day to feed them. All that is necessary is to give them a little extra green food, animal matter and plenty of water. This rounds out the balanced ration in the hopper and insures the greatest results.

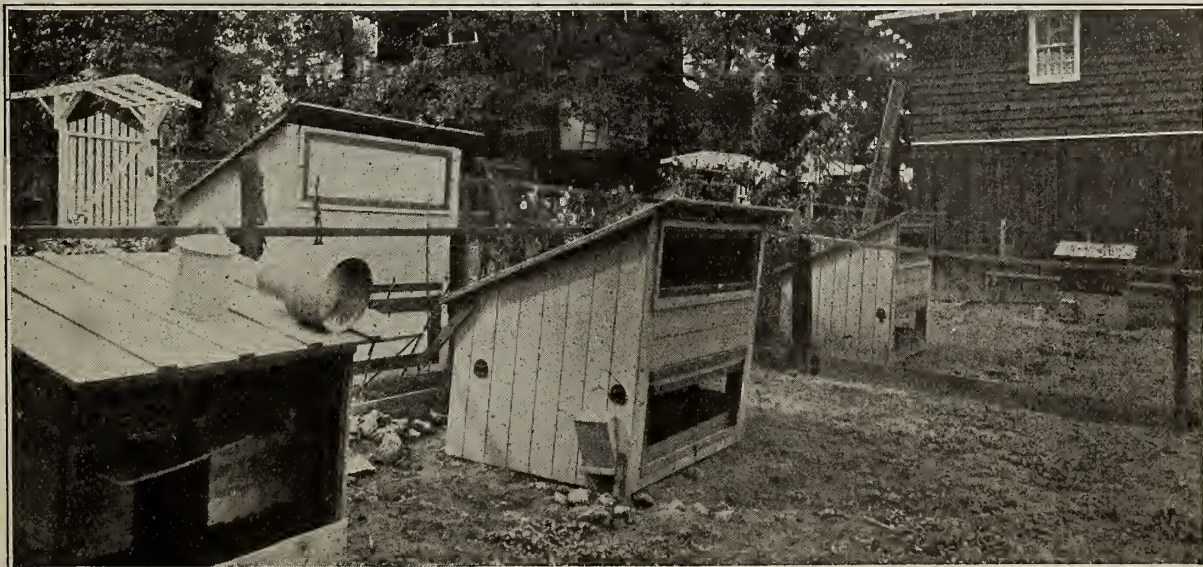
It has been estimated that a single

hopper will save in the course of one year over 30 per cent on the investment. What other investment could you make that would return you such a dividend?—C. C., in the Dakota Farmer.

A light dose of Epsom salts now and then in the drinking water helps to keep the fowls in health.

Any hen or rooster will become lazy if the feed is supplied in troughs or on bare ground, but when litter is given they will get so busy that the fat has no opportunity to collect in the tissues, for a fat hen is no layer, the fat makes laying an impossibility.

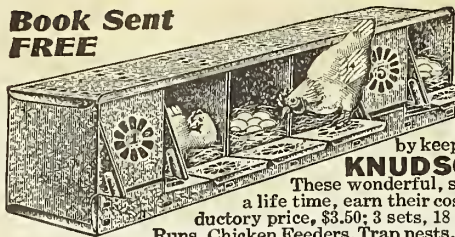
In mating, exercise care. As no one yet has produced the perfect fowl, all have some weak point, and the breeder's skill is shown in mating males strong in points where females are weak, or whose weak points are offset by high quality in the females.



Section of the poultry farm of O. B. Andrews, Chattanooga, Tenn., showing some of pens and incubator house



**Book Sent  
FREE**



## Lice-Proof Nests

**HAPPY HENS EARN BIG PROFITS.**

Keep your hens happy, get more eggs, make them pay you better by keeping them free from lice and mites, by equipping laying houses with **KNUDSON Galvanized Steel LICE PROOF NESTS**. These wonderful, sanitary, patented nests (not a trap nest) can't get out of order, last a life time, earn their cost many times over. Regular price, \$3.90, set 6 nests—special introductory price, \$3.50; 3 sets, 18 nests, \$10. Write for free catalog, Gal. Steel Brood Coops with Runs, Chicken Feeders, Trap nests, etc. Knudson Manufacturing Co., Box 587 St. Joseph, Mo.

## SOUTHLAND'S CHAMPION WHITE ROCKS

Have for years won more first, second, regular and special breed prizes than 53 competitors combined. We have also won a decisive majority of the sweepstakes prizes open to all breeds and varieties. These winnings were not at county fairs or minor shows, but at the South's largest shows, from 142 to 181 White Rocks in competition. We have met and defeated every Southern breeder of prominence and some of the most prominent 3 and 4 times. These are FACTS and we have the records to prove them. WHY EXPERIMENT with other strains when fifteen expert poultry judges who are authorities have testified to the superior excellence of our flock? We have supplied show birds all over the country and they won their ribbons, too. Raising better White Rocks is our sole business and we have 44 acres devoted exclusively to them. They are range raised, line bred, trap-nested and full of vim and vigor. We please our customers or refund the money. Stock for sale at all times. Eggs at \$25.00, \$15.00, \$10.00, \$2.00 per 15. **THE BEST IS NONE TOO GOOD.**

**MARTIN F. SCHULTES, Box 143 Albashire, BARTLETT, TENNESSEE**

## EGGS AND BABY CHICKS FROM FOGG'S SINGLE COMB WHITE LEGHORNS

All our breeders this season are old birds, they produce the strongest chicks—THE KIND THAT LIVE. If you want the most for your money, send for mating list now. Safe arrival of chicks and eggs guaranteed.

**N. V. FOGG, :- Box A, :- MT. STERLING, KENTUCKY**

## EGGS WHITE WYANDOTTES EGGS

I breed no other variety. Prize winners everywhere shown. Last winning, 1st pen, National Conservation Exposition, Knoxville, Tenn., 1913. No better nor healthier birds produced. Great layers. Raised on high and dry cedar range; never a mite, louse nor disease. Eggs, 1st pen, \$2.00 for 15. No stock to sell this season. Order ahead of needs.

**W. D. WILLIAMS, Jr., Westview, GREENEVILLE, TENN**

### BUFF COLOR

A letter we saw recently stated that the writer of it wanted to secure some birds of a certain buff variety. He said he wanted a deep orange buff, no light buff for him. Was this writer correct?

For answer it is only necessary to refer to the Standard. The orange or reddish buff was long ago ruled out of court by the fanciers of buff varieties, and the Standard calls for a rich golden buff. Orange buff is not the color now desired, and is not the color that wins at the leading poultry shows. And in our judgment orange buff is not a beautiful shade or color in poultry. But the rich, golden buff of the Standard—what is more beautiful than this?

The Standard rejects on one side the orange buff, and on the other the pale, or lemon buff. What is wanted is a shade of color like that of a ten dollar gold piece. The buff bird should be of even shade of color in hackle and on the surface of wings. Such birds satisfied the demands years ago, but they are not wanted now.

Buff is desired also in the undercolor in all sections, though surface color is more important than undercolor. The importance of undercolor is sometimes exaggerated. The buff color should extend to the primary feathers.

The latter are difficult to secure and are not often seen, but this is the ideal to be striven for.

That the color described above is beautiful is acknowledged by every lover of poultry, though it is not the favorite color with all. That it is a difficult color to get in perfection is one of its chief attractions to many.

The Buff Leghorn Club has issued a 90 page book, the value of which is priceless and worth more to any person interested than any \$2 poultry book yet on the market. It tells all about these great winter layers.—Geo. S. Barnes, Battle Creek, Mich.

### WHY INTENSIVE POULTRY KEEPING FAILS

Intensive poultry keeping is universally regarded as unprofitable both by commercial poultry keepers and Experiment Station experts. It never has paid continuously in the past and is not paying consistently now. That it cannot be made to pay in the future by improved methods and breeds is more than anyone can afford to say, but at the present time the risk in embarking intensively in the business is enormous.

And yet, the promises are often most alluring. Extraordinarily high profits on small investment with odd-moment labor have tempted many per-

**White and Columbian Wyandottes**  
**LIGHT BRAHMAS and S. C. WHITE LEGHORNS**  
Over 30 years a breeder. Stock and eggs for sale.  
**MICHAEL K. BOYER, Box H, Hammonton, New Jersey.**

## Engraved Cards

100 and Plate \$1.25  
Postpaid

**S. B. NEWMAN & CO.**  
**Knoxville, Tennessee**

sons with a speculative turn of mind to try for the same percentage of profits on large investments with hired labor. The inexperienced always fail, and the experienced never begin that way.

The causes of failure are quite evident to anyone who makes a careful investigation. But your get-rich-quick poultrymen seldom takes time to investigate. He thinks he sees a big fortune just ahead and that he had better occupy the field before a rival enters.

In his hurry he fails to see the points of essential difference between the conditions under which good profits were made and the conditions under which his business will be conducted. But these differences are many and real.

The man who makes a big success in a small way with his chickens is generally a man of experience. If not, he has studied the business in books and bulletins and poultry journals, has observed the breeds and methods of other poultry raisers, and has the happy tact of turning his study and observation to practical account. In addition to these qualifications he either does the work of caring for them as a labor of love and diversion, or sees that other members of his family does it rightly. Thus the cost of labor is eliminated entirely, and the best of care is assured. The amateur poultryman operating on a large scale has neither advantage. He is absolutely certain to have to pay well for labor, and almost as certain to get pretty poor labor at that. If he does it himself his time is an item of expense, and his services are likely to be so also. If he trusts the care and management to another he must pay well for it and take the risk of having the work poorly done.

Again, the successful small poultry raiser generally knows his flock. His breeds are adapted to conditions of climate, site and feed supply, and his individual hens are selected for vigor, stamina and egg production. If he sees fit to make changes he does it gradually, keeping his fingers carefully on the pulse of the business and his hand on its arm. His chickens don't get sick, and vermin-infested, and his hens don't loaf on the job. He keeps every member of the flock busy—growing, breeding, laying eggs. Activity is the law of profit.

The matter of feed is another thing



N. A. Contest  
282 Eggs

**TOM BARRON'S**  
—ENGLISH 200-EGG STRAIN—

Mo. Contest  
258 Eggs

S. C. WHITE LEGHORNS  
BUFF ORPINGTONS

**WORLD'S CHAMPION LAYERS**

WHITE WYANDOTTES  
S. C. RHODE ISLAND REDS

1st prize and loving cup in the Missouri Egg-Laying Contest 1912-13; 1st prize and cup at Storrs, Conn., 1912-13. Now in the lead in the present Missouri Egg-Laying; also leading Storrs' Egg-Laying Contest, and the North American Egg-Laying Contest. This proves they are the world's greatest layers. We can furnish a limited number of eggs for hatching from the winners of the Missouri Egg-Laying Contest, 1912-13, which made the marvelous record of 2073 eggs, 7 hens laying over 200 eggs, 258-246-243-226-219-219-208. eggs respectively. We trap-nest every layer every day in the year. Poultry experts state this strain to be the most profitable in America today. Eggs for hatching. Baby chicks. Free catalog, contains valuable information that will increase your egg yield.

THE PENNSYLVANIA POULTRY FARM, Address Office, 308 Pearl Street, LANCASTER, PENNSYLVANIA

that is altogether in favor of the small grower. The table and garden by-products of a moderately sized family will almost keep the flock without additional expense. With plenty of table scraps and a good garden with kale and mustard, a lawn of clover and alfalfa, a little corn grown here and a little wheat there, charcoal and ashes from the furnace, finely broken crockery, additional expenses are light. The thousand-hens-to-the-acre man has to buy all these.

Housing is another item in favor of the small grower. Many highly successful home-poultrymen raise their flocks in dry goods boxes that cost nothing and are placed around on the garden during the winter. All his hardy fowls want are shelter from the rough winds and a dry spot to roost in. The drop boards are thrown on the garden and sprinkled with land plaster, and the whole "house" is sweet and clean. Of course his hens are hardy and eager to lay. And incidentally the garden is improved almost one-half.

And most of all, the successful small grower is sure of uncontaminated ground. The extempore "colony houses" are moved about over the grounds into clean places. Should they become filthy they are burned and replaced almost without cost. If more substantial houses are used, they are small and easily cleaned. Disease is banished. Vermin are kept down. The flock is neither depleted by death nor weakened below the egg-laying point of vitality. The hens succeed, and therefore the owner succeeds.

But the conditions under which his little business and pleasure poultry-keeping is run is as different from these of the inexperienced intensive grower as the housewife's home is different from that of the hired cook.—C. J. McIntosh, Oregon Agricultural College.

#### TENNESSEE ROOSTER DAY

If coming events really cast their shadows before, Tennessee and Kentucky are to experience roosterless days, beginning with the third Saturday of next May and continuing until the warm weather is over, until the time when fertile and infertile

eggs keep equally well on their journey from the farm to the consumer. This has been through the efforts of the United States Department of Agriculture.

Some years ago Harry Lamon, in charge of poultry and egg investigations of the Federal Bureau of Animal Industry, began his studies of the care of the farm egg. Since that time he has been agitating better methods for handling this crop from the farm to the consumer, particularly pointing out that infertile eggs in the summer months carry better and eat better.

A few weeks ago he went to Nashville, Tennessee, for the purpose of inaugurating the boys' and girls' poultry club work in this state. While there he met the officials of the Southern Poultry and Egg Shippers' Association. The result of this meeting and talk is that this organization is busily planning to buy up all the male birds in these states next May and thus assure infertile eggs.

This association, with its buyers scattered throughout the states named will offer for male birds the same prices that are paid for hens. That is better than the breeders could get for them in the open market at that season. The birds will be slaughtered and marketed.

Cooperation from every source is being offered to make this move go through without a hitch. Through Tennessee's commissioner of agriculture, letters explaining the movement and the logic of it, will be sent to every school house in the state to be read to the pupils. Agents of the Federal farmers' cooperative work will post in the school egg placards explaining the value of the infertile over the fertile egg. The railroads will post these placards in their stations.

For a long time the Department of Agriculture has been drumming at the public to make it understand why \$15,000,000 of the \$45,000,000 annual loss to farmers from bad methods of producing and handling eggs is due to blood rings. And blood rings are nothing more nor less than the beginning of incubation in fertile eggs.

"Every dollar of this loss from

One of the Reasons Why

**GERMIFUGUE**

used externally or given internally gives such immediate relief, is because it is so quickly absorbed by the tissues, due to the penetrating oils in its composition. Whether you have use for it in the poultry yard, the stable or the family you will find Germifugue worthy a trial, and once tried you will never be without it.

2 oz. tins by mail, postpaid.....25c  
1 lb. tins by express (collect)....\$1.00

No free samples—but a 25 cent tin will be sent on approval; if it pleases you, you include the 25 cents with your "repeat" order.

Manufactured and for sale by

**J. H. PETHERBRIDGE**  
Mt. Airy, Philadelphia, Pa.

### Conaville Poultry Farm

Anconas, Rose Comb White Orpingtons, S. C. Whites, Buff and Black Orpingtons, White Buff and Barred Plymouth Rocks, Buff and White Leghorns and Rhode Island Reds. Eggs from fine stock at prices that's fair. Get our handsome booklet and mating list, with cuts from life. CONAVILLE POULTRY FARM, Mallet Creek, O.

blood rings," explains the department, "is directly preventable on the farm. Blood rings are a certain stage of chick development in the egg. Heat develops the germ until it becomes a blood ring. These often develop in the nest and in an unheated room in the house during the hot summer.

"Blood rings cannot be produced in the infertile egg and are troublesome only in hot weather. Infertile eggs are laid by hens that are not allowed to run with a male bird."

Then to give a few pointers, the department adds:

"Farmers are urged to adhere



## DONALDSON'S SINGLE COMB RHODE ISLAND REDS

Win the blue year after year, proving their matchless quality. For the balance of the season I will sell three settings of eggs from my finest exhibition matings for \$10.00. This is your opportunity to start with the best. Remember April and May pullets win at the winter shows. Baby chicks, hatching weekly at 20 cents each, \$4.50 per 25; \$8.00 per 50; \$15.00 per 100. Eggs \$1.50 and \$5.00 per 15. Write for mating list.

MRS. DONALD DONALDSON -- DECATUR, GEORGIA

## SANDY RUN POULTRY YARDS

Is still winning at the leading shows. Nearly cleaned up everything in White and Partridge Wyandottes at Raleigh, N. C., and Lynchburg, Va., in January (only the 2 varieties exhibited); have been winning like this for 15 years. Don't just buy up a few good birds and make a good winning one year and then quit, but we raise the birds to win in the largest shows year after year. Can sell you winners or birds mated to produce winners at low prices for quality. Several nice cockerels and some females yet for sale at \$2.00 each and up in White, Partridge and Columbian Wyandottes, Black Minorcas and Brown Leghorns. Eggs now ready from the best matings of above breeds at \$2.00 to \$5.00 per 15.

SANDY RUN POULTRY YARDS -- ELLENBORO, NORTH CAROLINA

## SOUTHERN STATES DUCK AND POULTRY FARM

The HOME of QUALITY BREEDING BIRDS, Box 214, COLLEGE PARK, GA.

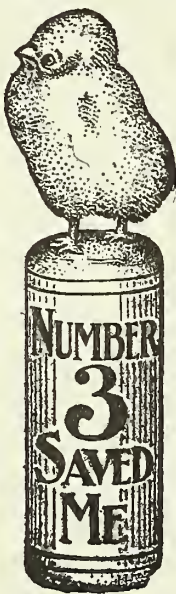
Breeders of the famous Buff Orpington Ducks, Barred and White Plymouth Rocks, White Wyandottes, S. C. White Leghorns, S. C. Black Minorcas, S. C. Rhode Island Reds, Black, Buff and White Orpingtons. Our birds are of the best and purest strains of blood of their respective varieties. They are bred for vigor of body and heavy yield. For breeders, they cannot be excelled. Book your order for your requirement of setting eggs and baby chickens now. Splendid idea to get a setting or two for new blood in your old flock. Mating list and catalogue mailed on request.

## WHITE DIARRHOEA CURED

Prescription No. 3 a Guaranteed Cure. J. C. Fishel says, "It does the work."

Prescription No. 5, a Sure Preventive. G. Owen says, "The only thing worthy of the name." Big box of either, 25c; both, 40c.

Baked Biscuit Meal, a life saving feed. Supt. Tebbs, The Coombs Poultry Farm, says, "Of 100 chicks hatched in February, I lost only four in two months." And he feeds Baked Biscuit Meal from the first feed. 5 lb. box and a box of either No. 3 or No. 5 for 50c; all three, 65c. THE NABOB REMEDY CO., Box 31, Gambier, Ohio.



strictly to the following rules in handling their poultry and eggs:

"Keep the nests clean; have a nest for every four hens.

"Gather the eggs twice daily.

"Keep the eggs in a cool, dry room or cellar.

"Market the eggs at least twice a week.

"Sell, kill or confine all male birds as soon as the hatching season is over.

These rules look exceedingly simple in view of the department's claim that their observance will mean the saving of \$15,000,000 annually by eliminating blood rings.

Next May, Tennessee and Kentucky are going after the rooster with a vengeance. "Rooster Day" they call it. "Rosterless Day" would seem a better title.—Morristown Republican.

## THE POULTRYMAN'S WORST ENEMY

The poultryman's troubles are many. From one month to another, the year round, he's got to keep his eyes peeled lest he gets knocked out by lice, roup, cholera, white diarrhoea, rats, skunks, hawk, cast. There—guess we will not name any more for fear the reader who might be coming down with the chicken fever might get over the fever and declare he will not embark in the poultry business until part, at least, of the poultryman's enemies are cut out of this list. If he feels that way we may as well inform him right now that that time will never come; it's a continual fight for the poultryman, year in and year out, to keep these enemies in check, to say nothing of ever expecting to blot out any of them entirely, but it's possible for any individual poultryman to handle these enemies in such a manner that on his part he may keep them in check to the extent that they can not get foothold enough to do serious harm. If the poultryman loves his pets, he will take care of them; if he does not, he is not a true fancier. Now, we do not intend to discuss all these enemies to the poultry industry, for if we did, we would bite off more than we could chew in a whole year, but will take up one, only one, but of this one there are millions. This one enemy is the poultryman's enemy proper. Lest the reader be impatient and in a hurry to know the name of this champion enemy, we will, with as much composure as possible, briefly announce that it is lice, simply lice. Oh, I wish it were possible to give them a name that would do justice to them, but it is out of the question—it can't be done. We believe there's no one thing in the poultry business that gets up more excitement and keeps it up than does a plentiful supply of all varieties of chicken lice. Women are especially adverse to their presence. They have been known to



### WHITEWASHING

and disinfecting with the new  
**"Kant-Klog" Sprayer**

gives twice the results with same labor and fluid. Also for spraying trees, vines, vegetables, etc. Agents Wanted. Booklet free.  
**Rochester Spray Pump Co.,**  
206 Broadway, Rochester, N. Y.

kill them outright, in great numbers when provocation was sufficient, and not a single woman was ever known to be punished for this horrible wholesale slaughter, unless it was by having her blood cool off so suddenly after the slaughter that she caught cold and died with pneumonia.

Say did you ever hear of old Mr. Barton, a very quiet old farmer, who never allowed himself to get excited or ruffled over anything, and his wife, who got easily excited even over little matters—like chicken lice. Now Mr. Barton was used to his wife's failings and was always ready in a cool and collected manner to stamp out quickly the fire that shown in her eyes at such times—generally by a dry joke or two. One broiling hot morning in July Mrs. Barton came on a run to the garden where her husband was at work, shouting as she dashed into the garden swinging her old sun bonnet with a vengeance, "Say, paw, what under the sun will we do? The chicken house is alive with chicken lice". Looking up from his work suddenly Mr. Barton calmly remarked: "My dear wife you seem to be in an exceedingly excitable condition. What's on your mind now, maw?" They're not on my mind," she snapped, "they're on my neck, my hands and face, and oh, they're just eating me up." Meantime she had stamped around at such a rate that she had entirely spoiled a dozen nice tomato plants her husband had just set out and watered nicely, so they would grow fast. Finally he looked up and leaning on his hoe handle he said, "Say wife, I've hearn considerable about the tango dance, but I was not aware that my wife without any previous larnin' could go right out in the garden among the tomatoes and right before folks do a reglar tango trick like that. Now, I tell yer, it makes me feel young, maw; an' if the lice up in the chicken house don't quit botherin' you, I'll set a couple of Tommy's steel traps up thar an' guess we'll clean them out in a hurry, maw. But, say, maw," he continued, "seems ter me like them ther chicken lice are so small they can't hurt nothing much and I wouldn't give much for a hen that couldn't take one at a time and kill off the hull bunch in a short time." Mr. Barton had occupied her mind in such a manner for a few minutes that all she could do was to stand still and cool off while she gave her neck and face an occasional dig for the purpose of removing her tormentors. The lice question has both its humorous and serious sides. If our good editor does not punch this down into the waste basket, we will try and put on a sober face and discuss the serious side of the subject, "Lice and Mites, the Poultryman's Greatest Enemy."



## EGG BOUND

Egg bound is the lodging of the egg in the oviduct so that it cannot be expelled owing to a too fat condition. The liver becomes enlarged, and the muscular system weakened by fatty degeneration. Not only is fat deposited between the muscular fibers, but many of the fibers themselves are replaced by fat. This makes the muscles not only weak in action, but quite easily ruptured. In common with other muscles, those surrounding the oviduct (egg passage) become weak and flabby, and if a large egg is on its way out, or if through fright extra strain is brought upon these muscles, the passage is easily torn open, and the egg passes into the abdominal cavity, and is followed by peritonitis—and death. Hens are sometimes found dead upon the nest, apparently there for the purpose of laying an egg. This is often caused from the fatty condition of the heart muscles. The action necessary to eject the egg being too much for the weak heart, it staggers and then stops and the hen is found lying dead in the nest. An overfat hen has a deposit of fat around the bowels, pressing upon not only them but also the lower part of the egg passage. This acts as a foreign body and obstructs the passing of the egg. Very large, soft shelled or broken eggs are causes of difficulty in the oviduct. Pullets are often egg bound for a few days, when they begin to lay. This is owing to the small passage; but after a few eggs are passed the oviduct becomes larger and the trouble ceases. If the egg bound condition is owing to long continued fatness, all treatment will fail. Dip the finger in sweet or castor oil, and introduce into the vent. Ten drops of fluid extract of ergot given to the hen from a spoon, and followed in half an hour by holding the bird over hot water so the steam can reach the vent, will sometimes relieve this condition. At all events, remove her from the male bird and feed soft feed and warm water. If successful in removing the egg, and the bird is worth the extra trouble, keep her in dry, sunny quarters, and in her drink put ten drops tincture nux vomica to one pint of water. Give this for ten days, avoiding feed rich in starch, such as corn and buckwheat.—Poultry Record.

## THE LONG-TAILED ROOSTER OF JAPAN.

The breeding of roosters with long tail feathers has long been the pastime of the natives of Shinewara, on the island of Shikoku, Japan. By patient selection of a breed of fowls continued through one hundred years the tail feathers of the ordinary barnyard cock has been lengthened until some of the roosters on the island now have tail feathers measuring 18 feet. The hens of the same breed have tail feathers only 8 inches long. In breeding the roosters it is necessary to confine them to close quarters so that the feathers can not wear out or be molted. Through a

# WHITE ROCKS

I will not hatch any more this season, and offer some of my best birds for sale. Write for prices if you want a bargain in some fine breeders. Will spare a few exhibition birds also. Eggs balance of season, \$3.00 per 15. Write me anyway.

HENRY W. LESTER

THOMASVILLE, GEORGIA

## OAK GROVE POULTRY FARM

Single Comb White Leghorns, the blue ribbon kind, and bred to lay. A limited number of eggs from first prize pen at Birmingham, Ala., in January, 1914, at \$7.50 per 15. Other mating at \$5.00 and \$3.00 per 15. Satisfaction guaranteed. Book your order now.

G. H. McMAHON, Prop., Box No. 13, EATONTON, GEORGIA

## ERVIN'S S. C. RHODE ISLAND REDS

Have won places in the hottest of competition wherever shown. Some of my winnings for 1913: Spartanburg's great poultry show, 87 Reds competing, 1st pullet; 1st and 5th hen; 3rd cock; 4th cockerel; 1st pen. Special for best pullet in show, all varieties competing. Atlanta's great Southern International show, 2nd pullet and 5th cockerel. Will sell a limited quantity of eggs from my best pens at \$5.00 for 15. Eggs from other good Reds, \$2.00 for 15.

J. D. ERVIN P. O. Box 97 SPARTANBURG, S. C.

## APRIL IS THE BEST MONTH

To get your S. C. White Leghorn chicks. Don't send any more money North. We have just as good stock in the South as can be produced. For stock, eggs for hatching or baby chicks, write me.

O. T. HALLMAN

R. 2

Box 364

SALISBURY, N. C.

## EXHIBITION AND UTILITY

S. C. White Leghorn eggs, \$1.00 to \$5.00; White Rocks, \$1 to \$3; Black Orpingtons, \$3 to \$5; Blue Andalusians, \$3 to \$5. My birds won 26 ribbons at three shows this winter. Have fourteen pens mated and a great bunch on free range. Order from this ad. Satisfaction guaranteed. If you do not get ten chicks from every setting, will replace eggs free of charge. Write me your wants.

LOMBARDY HEIGHTS POULTRY FARM, Jno. O. Reid, Prop., STANFORD, KY.

careful routine the fowl lives his eight or nine years of life in a cage so narrow that he cannot turn around in it. When he is taken out for exercise every day or so he is carefully watched by an attendant, and from time to time his plumage is carefully washed and dried.—Popular Mechanics' Magazine.

### WHY CHICKS DIE IN THE SHELL.

Here are some of the common reasons for the germ dying in the shell. Paste it up in the henhouse or by the incubator, where you can read it frequently:

Weak parent stock by inheritance. Immature and diseased parent stock. Improper feeding, handling and housing of breeding stock.

Eggs saved too long before incubation.

Eggs kept in too warm or too cold temperature before incubation.

Allowing the eggs to get chilled before collecting in winter.

Allowing eggs to be partly incubated in warm weather before collecting.

Eggs incubated out of natural season.

Careless selecting of eggs for incubation.

Eggs from breeding stock, fed for forced egg production.

Rough handling of eggs before incubation.

Allowing the eggs to evaporate too much before incubation.

Too many male birds in a pen or too few.

Weak and immature male birds at the head of the pen.

Eggs saved for incubation and not turned regularly.

Handling eggs with greasy or oily hands.

Too high temperature for the first week of incubation.

Impure air during incubation.—American Poultry Advocate.

Don't blame all the poor results this season to the incubator, or the old hen or the eggs, for the fault is more frequently in ourselves. If you look for it in yourself you will see that the incubator is right, that it is run right and cared for as it should be. Instead of blaming the old hen, see that she is set in a good place, that she is kept in good condition and cared for properly. Instead of blaming the eggs, see that stock you set from is good, thrifty stock, worthy of producing the results that you hope to obtain. You will get enough culls by breeding from the very best stock, let alone breeding culls and expecting them to reverse nature's laws and produce great winners.—Ex.



## S. C. White LEGHORNS

Eggs from prize winning and business birds, balance of season \$2.00 per 15; \$5.00 per 50; \$8.00 per 100.

C. W. ANDERSON -- SPARTANBURG, SOUTH CAROLINA

## S. C. BUFF LEGHORNS

High class stock. Winners of many ribbons. Layers of many eggs. Hatching eggs \$1 to \$3. Satisfaction guaranteed. Send for literature. HOYAL JOHNSON, Brush Creek, Tennessee.



## For EGGS and STOCK

from Leading Strains of Poultry, write

J. D. GARBER -- HARRISONBURG, VA.

Special Mated Pens at Very Reasonable Prices

## READ! MARK!! and INWARDLY DIGEST!!!

That Nevin Poultry Farm breed Barred Rocks, S. C. White and Brown Leghorns, S. C. Reds, S. C. Black Minorcas, Cornish Fowl, Houdans, White and Silver Wyandottes, White Orpingtons, Light Brahmas; Fawn and White American, Dark Fawn and White English, and White (imported) Indian Runner Ducks and Pekin Ducks. Eggs \$2.00 per setting. White Guineas, White, Buff, Black, Golden Sebright and R. C. White Bantams. Eggs \$1.50. Stock for sale at all seasons. At it twenty years. Catalogue.

NEVIN POULTRY FARM, Route 7, CHARLOTTE, N. C.

## White ORPINGTONS and REDS

**Birds of Quality.** In six among the best shows in the Carolinas during October, November and December, 1913, we won over thirty first premiums. Our stock is as good as there is. Our birds mated by one of the best judges of the South. A liberal guarantee on all eggs for hatching. Eggs, \$5.00, \$3.00, \$1.50 for 15. We prepay express on two or more settings.

HUNTER & FORBES -- NORWOOD, NORTH CAROLINA

MEMBER AMERICAN  
PLYMOUTH ROCK CLUB.

MEMBER AMERICAN  
CORNISH CLUB.

## WYNNEWOOD POULTRY FARM

Breeder of Royal White Cornish Games. When full grown these birds weigh 10 to 12 pounds, males; 7 to 8 pounds, females; and often excel these weights; will lay and set every month in the year. Imperial Ringlet Barred Plymouth Rocks, S. C. White Leghorns, White African Guineas. The prizes won by my poultry in the largest shows of the South, under judges of national reputation, speak in loud tones of their quality. If you want eggs for hatching or stock, write me. Booklet free on request. MRS. A. S. GORRELL, Morristown, Tenn.



### AMERICAN BARRED PLYMOUTH ROCK CLUB

The annual meeting of the American Barred Rock Club was held at the Indianapolis show February 5th, 1914. The following officers were elected for the coming year:

President:—C. E. Spaugh, Indiana.

Secretary-treasurer:—H. D. Riley, Strafford, Pa.

Vice-presidents:—E. B. Thompson, New York; W. S. Russell, Iowa; A. C. Smith, Minnesota; M. W. Baldwin, Iowa; W. E. Bright, Massachusetts;

Jno. Pringle, Canada; L. H. Reade, Virginia.

Honorary vice-presidents:—Victor Bradley, Massachusetts; D. F. Palmer, Illinois; S. M. Goucher, Pennsylvania; C. H. Latham, Massachusetts; H. Nicholson, Massachusetts; F. B. Havens, Michigan; Amos Vogt, Iowa; J. T. Huston, Pennsylvania; J. R. Moore, North Carolina; Frederick Espe, California.

Executive committee: H. P. Schwab, New York; C. H. Welles, Connecticut; A. C. Hawkins, Massachusetts; E. C. Branch, Missouri; C. N. Myers, Pennsylvania; R. L. Simmons, North Carolina; R. J. Walden, Maryland.

The report of the secretary-treasurer showed the club to be in a flourishing condition, 506 new members having joined the past year. The new constitution and by-laws was adopted. It was voted to give \$25.00 to be offered as specials to a show in each of the five states that enrolled the greatest number of new members in a year, this show to be chosen by vote of the state members. It was voted

## HICK'S ANCONAS

Winners State Championship Cup state meet Ancona Club of America at Patterson, N. J., Nov., 1913. At state meet, same club, Grand Central Palace, N. Y., Special for Best Ancona in show. Also at Madison Square Garden, Philadelphia, and Augusta, Ga. Stock, eggs, baby chicks. Write for catalogue today. DR. PETER HICKS, Box 334, Bound Brook, New Jersey.

that this club go on record as favoring the placing of the names of all exhibitors on coops before judging at all shows. It was voted to recommend reducing the standard weight of a Plymouth Rock cock from 9 1-2 pounds to 9 and of a hen from 7 1-2 pounds to 7. The secretary was instructed to publish a club catalogue this coming spring. Every breeder of Barred Rocks is invited to join the club. Its membership list is made up of prominent breeders of Barred Rocks of the United States and Canada. It is a directory of who is who in the Barred Rock world. If you want to be known, and if you want to have a hand in shaping the future and in keeping at the top our favorite breed, join the club. The dues are \$1 a year and you are eligible to compete for our handsome club ribbons at all shows, and for our state cups which are offered in every state, besides receiving literature of the current happenings in the Barred Rock world. Send in your name at once, so that it may appear in the catalogue soon to be published. Henry D. Riley, secretary, Strafford, Chester County, Pa.

### IMPORTANT NOTICE

In our February report of the National Egg Laying Contest on page 4 under White Wyandottes, we reported pen 18 of the Penna Poultry Farm, Lancaster, Pa., as only having 405 eggs. Our mistake was made in carrying forward the totals for the previous months, and the grand total of this pen should have been 495 eggs. This would have placed the Penna Poultry Farm's pen of White Wyandottes as first for that variety, and Tom Barron as second. This would also move the White Wyandottes up to third place in the contest, and they should follow the Buff Orpingtons on page three. If you will make this correction, you will greatly oblige us.

Yours very truly,

T. E. Quisenberry, Director.

### NATIONAL BOURBON RED TURKEY CLUB

The National Bourbon Red Turkey Club is a live, up-to-date club, a member of the American Poultry Association and consulted by that body in regard to matters concerning the interests of the Bourbon Red Turkeys. The club will begin its 8th year July, 1914. All persons interested in the welfare of the genuine Bourbon Red Turkey should join this club.

MRS. MINNIE M. B. BROWN,  
Secretary.

Appleton City, Mo.



**TYPEWRITERS PHONES**  
**REPAIRED RENTED REBUILT 1313**

## TYPEWRITERS

Adding machines and cash registers repaired and rebuilt; supplies, ribbons, and parts in stock at all times. Typewriters sold on easy terms. We have new, rebuilt and second-hand typewriters of all makes. Prices from \$20.00 upward.

AGENTS: THE DALTON ADDING MACHINE, THE DICTAPHONE, THE ROYAL STANDARD & CORONA FOLDING PORTABLE TYPEWRITERS, AND MONTAGUE MAILING AND ADDRESSING MACHINES.

MARBLE CITY TYPEWRITER CO.

W. A. A. Johnston, Prés.,  
 617 Market St., Knoxville, Tennessee.

## Breeders Cards

CLASSIFIED ADVERTISING RATE, 2 cents per word, flat, each insertion, subject to a discount of 10 per cent on yearly contracts amounting to \$6.00 or more. Advertisements in this department must be paid for in advance.

### ANCONAS.

ANCONAS—Eggs for hatching from choice matings, \$2.00 per 15; \$10.00 per 100. I personally select all eggs I ship. W. L. KIRKPATRICK, Hendersonville, Tenn. 119

PRICES SMASHED ON PORTER'S BLUE-BELL ANCONAS—Our midsummer sale now on. A great chance to get good stock cheap. Hens and cock birds, show birds and utility stock in numbers to suit. A chance worth grabbing. Write your wants for prices and booklet with illustrations from life. S. P. Porter, Mallet Creek, Ohio. tf

ANCONAS—When you want egg machines, get Kenney's Anconas. I have the laying and winning kind; won wherever exhibited; farm range; eggs, \$1.50 per setting; \$6.00 per hundred; baby chicks, 20 cents a piece; write for mating list. CRYSTAL HILL POULTRY FARM, Albert W. Kinney, Prop., Route No. 2, Washington, New Jersey. 119

TIMMS' POULTRY YARDS—Anconas; utility; breeders and show stock; eggs and chicks a specialty; satisfaction guaranteed. JOHN TIMMS, Malta, Ohio. 120

MOTTLED ANCONAS—(Shoemaker strain) Eggs \$1.50 per 15; Black Orpington eggs \$2.00 for fifteen; White Leghorn eggs \$1.00 for 15. My birds are all first class; no culls. JAKE LEMON, Dandridge, Tenn. 121

ANCONAS, S. C.—The world's best layers and the most beautiful birds that money can buy; eggs \$3.00 to \$10.00 for 15. F. P. RISTER, Chapin, S. C. 120

S. C. ANCONAS—The world's greatest winter layers; 15 eggs \$1.50; Partridge Rocks, the most beautiful fowl living; 15 eggs \$2. EPH. BEHNEY, Outwood, Pa. 121

SINGLE COMB ANCONAS—Specialist of the middle west; \$1.50 and \$2.50 per setting or \$8.00 per 100; Catalogue free. PINE CREEK VALLEY POULTRY FARM, Norman Bartlett, Prop., Williamsport, Ind. 119

### ANDALUSIANS.

BLUE ANDALUSIANS—And White Face Black Spanish. Best of stock. 15 eggs \$1.50; 30 eggs \$3.00. A. N. BROWN, Woodbury, Tenn. 123

### BANTAMS.

BANTAMS, BLACK ROSE COMBS, GOLDEN SEBRIGHTS, BUFF COCHINS—Eggs 15 \$2.00. J. L. MOORE, Rolfe, Iowa. 119

RARE BARGAINS—Golden and Silver Sebrights, Buff, Black, White and Partridge Cochins, Rose Comb Black, Black Tailed Japanese, Red Pyle and Black Red Game and Single Comb White Leghorn Bantams. Highest honors Madison Square Garden. Buy the best. Make your wants known. 1,000 birds. PROPER & SON, Schoharie, N. Y. 126

GOLDEN SEBRIGHT BANTAMS—Eggs \$1.50 a setting. RIVERSIDE POULTRY YARD, Greenville, S. C. 120

SEND FOR BOOKLET—Largest breeders, leading varieties, Game and Cochins Bantams. Madison Square Garden winners, shipped on approval. MOHAWK BANTAM YARDS, Box L, Schenectady, N. Y. 119

BANTAMS—34 varieties. Egg orders booked; send 2 cent stamp for circular. THE FENN BANTAM YARDS, Box 1, Delavan, Wis. 121

GOLDEN SEBRIGHT BANTAMS—Bred from the best imported stock, all prize winners and specials, at two state fairs. A limited number of eggs \$2 per setting. J. VINCENT MUSSER, College Heights, Meridian, Miss. 120

### BUCKEYES

DEEM'S ARISTOCRAT BLUE RIBBON BUCKEYES—Hatching eggs for early chicks. BUCKEYE POULTRY YARDS, Eaton, Ohio. 120

BUCKEYES—Stock and eggs. L. T. PLACE, Meshoppen, Pa. 120

### BUTTERCUPS

SICILIAN BUTTERCUPS—The best laying breed. Eggs for hatching from selected birds. ARDEN POULTRY YARDS, Arden, N. C. 119

SICILIAN BUTTERCUPS—Eggs for hatching, prize winning kind. Mating list ready. HARRY C. KNOPP, Rocks, Md. 120

SICILIAN BUTTERCUPS—The greatest layers known; eggs from finest, healthiest stock; \$3.00 setting of 15 eggs. A. A. LOVE, 809 East Clinton St., Huntsville, Ala. 119

SICILIAN BUTTERCUPS—Blue ribbon winners at Mohnton, Reading and Kutztown. Eggs \$2.00 per 15. FRANK BUCK, Fleetwood, Pa. 119

PRIZE BUTTERCUP EGGS—\$3.00 and \$1.50 for 15. Club member. B. F. PEARCE, Danbury, Conn. 120

### CAMPINES.

IMPROVED SILVER CAMPINES—Eggs \$3.00 setting. Book orders early; circulars and mating list ready. T. L. HILTON, Lancaster, S. C. 119

SILVER CAMPINES—English and Belgian imported. Get them with the big egg record. Eggs and baby chicks. Write today. Dept. D, MILNER'S MINORCA FARM, Waretown, N. Y. 119

SILVER CAMPINES—Sicilian Buttercups; eggs ready March 1st, \$2.00 per setting. E. H. ADAMS, Outwood, Pa. 119

LAKENVELDERS—Eggs from prize winning stock, \$2.00 per 15. Silver Campine eggs, \$2.00 per 15. CHAS. E. GROVE, Mercersburg, Pa. 120

GOLDEN CAMPINES—Imported stock; eggs \$2.00 per 15. MRS. W. T. BULL, Box 29, Greenville, S. C. 121

IMPROVED SILVER CAMPINES—Eggs \$5.00 setting. Also Golden and Black Wyandottes, Buttercups and Salmon Faverolles, \$3.00 up. Indianapolis winners two years. Order now. JONES' POULTRY FARM, Alexandria, Indiana. 120

### ENGLISH PENCILED RUNNER DUCKS, WHITE EGG STRAIN

The English Penciled Runner Club of America was organized April 4th, 1912. The club is governed by a board of 12 directors, including the officers. We propose to establish state vice presidents in each of the states, to look after the interest of the club.

The English Standard has been adopted, with the addition, that any duck laying a green egg is disqualified. Any member of this club known to exhibit at any show or to sell any strain of Runners that lay a green egg, is liable to suspension from the club.

Our object is to make it a guarantee to all purchasers of Penciled Runners, that when they are dealing with members of this club, they are getting pure white egg strain.

We expect the Penciled Runner to be admitted to the American Standard this year, it being the oldest known variety of Runners.

Membership dues, including first year's dues, is One Dollar. All breeders of the English Penciled Runners (white egg strains) are requested to join, and help boost the world's champion egg layers, as the Penciled Runner now holds this title, having won it in competition in which 6 ducks averaged 267 eggs per year.—Charles Fraser, Secretary and Treasurer, Marlton, New Jersey.

### SPECIAL NOTICE TO PAID UP MEMBERS OF THE FORMER NATIONAL SINGLE COMB BLACK ORPINGTON CLUB

At the annual meeting of the National Single Comb Black Orpington Club held in Pittsburg, Pa., Jan. 19-24, in connection with the annual show of the Exposition Poultry Association, action was taken looking forward to consolidation with the American Black Orpington Club, provided, however, that the executive committee of the American Black Orpington Club accept all members who may be paid up in dues to the National Club as paid in advance members until Sept. 30th, 1914, in the American Black Orpington Club. Official.

C. J. CARTER, President.

W. C. LASSITER, Vice-President.

Executive Action.—The executive committee of the American Black Orpington Club having in mind the betterment of the best of all breeds and the effect the merger will have in boosting the breed as a united club has decided to grant to members of the National Single Comb Black Orpington Club who may have their dues paid up full membership in the American Black Orpington Club until Sept. 30th, 1914. All members thus gained will be accorded full benefit of privileges shown to all members, no distinction being made.

C. S. Byers, President; R. N. Barnum, Vice-President; Ora Overholser, Secretary-Treasurer. W. C. Lassiter, Joe Coleman, Wm. M. Lynn, executive committee.

READ THIS. In line with the above action all members who may be paid up in the National should send such letters of receipts as they may have to the secretary-treasurer at once, when membership card showing dues paid in advance until September 30th, 1914, will be issued and mailed to them. Do this at once. Mail reply in envelope enclosed with this letter.

AMERICAN BLACK ORPINGTON CLUB, Eaton, Ohio.

### THE 1914 AMERICAN WHITE ORPINGTON CLUB BOOK

The 1914 club book of the American White Orpington Club is just off the press, and is full of timely articles on the breed, as well as containing list of members of the club.

This is one of the strongest specialty clubs in the country, and growing steadily all the time. It is devoted to the interests of this grand breed, and all breeders of White Orpingtons should certainly have a copy and become members of this club.

New officers were elected at the annual meeting held at Cincinnati, Ohio, in December, and are as follows:

President, Earnest B. Rogers, Cincinnati, O.; Vice-Presidents, Percy Cook, Scotch Plains, N. J.; O. W. Aldrich, Columbus, O.; Secretary-Treasurer, F. S. Bullington, Richmond, Va.

Executive committee: Ernest Kellerstrass, Kansas City, Mo.; R. Woolery, Bloomington, Ind.; W. A. Stoltz, Indianapolis, Ind.; Jos. H. Fischer, Jackson, Mo.; Percy Cook, Scotch



Plains, N. J.; E. B. Rogers and F. S. Bullington.

The life membership fee was changed to \$5.00 at the Cincinnati meeting, which should lead to a great increase of members in this class, as they have no further dues to pay.

The initiation fee is only \$1.00, which pays for the first year's dues.

F. S. BULLINGTON, Secy.  
Box 328, Richmond, Va.

#### WHEN THE BABY CHICKS ARRIVE WHAT WILL YOU FEED THEM?

The sale of day-old chicks has placed the pleasures and profits derived from raising poultry within the reach of many to whom it would be out-of-the-question, if they had to hatch the chicks themselves. These chicken-raisers as well as the rest of us older and somewhat more experienced breeders—have found that the one hardest problem, after receiving the chicks, is to make them live through the first ten days. Many hundreds of thousands of chicks are lost each season during this first critical period because of bowel troubles. This is due, in most cases, to improper feeding. Young chicks, turkeys, pheasants, ducks, etc., have delicate digestive organs and they cannot readily absorb and assimilate corn meal and other improperly balanced feeds. They need something especially prepared and balanced with the proper ingredients to regulate and strengthen their delicate organs until they are old enough to "switch" on to grain feeds.

For about thirty years, Mr. F. P. Cassel of Lansdale, Pa., has been saving thousands and thousands of chicks' lives for poultry raisers all over the country with his specially prepared "F. P. C. Chick Manna." This food is intended to be fed to young fowls only during the first ten days or so after hatching. It is composed of only the best ingredients that have nutritive value or aid in preventing diarrhoea and other chick complaints. No material is used to give F. P. C. Chick Manna useless weight or bulk. It is an honest, complete chick food and tonic sold at an honest price.

Many prominent poultry-keepers endorse this chick food. Michael K. Boyer, the eminent poultry editor, says: "Chicks not only like F. P. C. Chick Manna, but they thrive wonderfully on it." There are many imitations on the market but it will pay everyone to insist on getting this original Chick Manna. F. P. Cassel & Son, Lansdale, Pa., are the sole manufacturers and will ship direct to our readers if the local dealer does not carry this chick food in stock. Write today to them for their special introductory offer of F. P. C. Chick Manna by parcel post.

Hot Springs, Ark., Dec. 5th, 1912.

Dear Sir: Enclosed please find 25 cents; send to my address a 2 oz. box of Germifuge. While I was in attendance at the Little Rock show, one of my Black Leghorn pullets developed the "sore head". One of her eyes became closed and comb full of sores. Mr. Meeks says, "I have something that will cure it," and gave me a little Germifuge. I rubbed it into the sores and two applications did the work, so that is why I am sending to you for some. Please send as soon as possible and oblige.

ORLANDO C. WILLIAMS.

#### "OCULUM" RELIEVES ROUP IN SEVERE CASES ON A LARGE SCALE

The testimonial below is from a big breeder who had hundreds of birds with roup in serious form:

"I have cured 135 hens with 'Oculum' and have 70 more under treatment that are doing nicely. The bunch I inoculated that I was finding 8 or 10 cases in daily I haven't found any in for a couple of days. And trust my troubles are waning. I was getting 20 eggs per day when I inoculated the first time 3 weeks ago, and got 300 today (March 6.)

D. B. McNEIL, Cunningham, W. Va."

Any man who wants to get eggs and keep down disease will make no mistake in using "Oculum." Tests like the above tell the truth. See ad. in this issue.—(Ed.)

Many dealers object to eggs with pale yolk. When you find yours are getting that way, put a little more corn in the ration.

**SILVER CAMPINES**—Jones-Kennedy and other strains. Eggs, \$2.00 per 15 prepaid. Fertility guaranteed. **MAY WILLIAMS, Morristown, Tennessee.** 119

#### CHICKS

**50,000 CHICKS**—Leghorns; all varieties. Catalogue, stamps. **FAILING POULTRY FARM, LaFargeville, N. Y.** 119

#### COCHINS.

**LARGE PARTRIDGE COCHINS**—Cockerels, pullets and eggs. **NINTZELL BROS., Oshkosh, Wis.** 119

#### DOGS

**50 COLLIES**—Write your wants. Catalogue. Stamps. **FAILING POULTRY FARM, LaFargeville, N. Y.** 119

#### DUCKS AND GEESE

**ENGLISH FAWN AND WHITE INDIAN RUNNER DUCKS**—Eggs, 15 for \$1.00. S. C. Buff Orpingtons. Eggs \$1.00 to \$2.00 per 15. Circular free. **CHURCH POULTRY YARDS, Doeville, Tenn.** 119

**DUCKS**—Blue and Buff Orpington Ducks, both varieties are great layers of large white eggs. Winner in 1913 at West Tennessee Poultry Association, Jackson, Tenn., and Tri-State Poultry Association, Memphis, Tenn. Ask for booklet. **MARGINAL POULTRY YARDS, H. Y. Hinson, Prop. Somerville, Tenn.** 119

**WHITE RUNNER, WILD MALLARD DUCKS**—And Silver Campine chicken eggs Tennessee State Fair champion; write for mating list. **C. M. KIRKPATRICK, 14th and McKinnie, Nashville, Tenn.** 120

**FAWN AND WHITE AND ENGLISH PENCILED INDIAN RUNNER DUCKS**—With a show record. Eggs, \$1.00 and \$1.50 for 12. **MRS. MOLLIE R. PORTER, 921 Gallatin Road, Nashville, Tenn.** 119

**QUEEN RUNNERS LEAD**—Twenty-three birds entered both New York's monster shows every one under the ribbons; twenty-two under the blues; Penciled or White trios, \$10.00 to \$30.00. Hatching eggs. Leaflets. Biggest, best Runner book, 75c. **C. S. VALENTINE, Ridgewood, N. J., Box 4.** 119

**DUCKS! DUCKS!! DUCKS!!!**—White, Fawn and Penciled Indian Runners. Eggs, \$1.25, \$1.00 and 90 cents fourteen; prize winners. Heavy layers. Satisfaction guaranteed. **E. R. BROWN, Box 337, Arlington, Va.** 119

**DUCK EGGS FOR SALE**—Buff Orpington Duck eggs \$1.50 per 13. Best pen \$5.00 per 13. Wild Mallard, White Runners and English Penciled eggs \$1.00 per 14. Satisfaction guaranteed. Each kind penned separate. **L. L. BOTTO, Boston, Ky.** 120

**BUFF ORPINGTON DUCKS**—Eggs \$1.50 per 13. Large white eggs. Swaim's strain. Rouen duck eggs \$1 per 13, \$5 per 100. Good stock for sale. **MRS. JENNIE BIDDLE, Darlington, Ind.** 119

**WHITE RUNNER DUCKS**—13 eggs \$1.75; 26, \$3.00 **HONEY CREEK POULTRY FARM, Kahoka, Mo.** 119

**TRIO ROUENS**—\$5.00; colored and white Muscovy \$3.00 pair; White Guineas. **RALPH WILSON, Bloomville, Ohio.** 119

**EGGS**—From Indian Runner Ducks on free range, \$1.00 per 15; \$5.00 per 100. During March 25 ducks laid 672 eggs. **REV. S. R. CROCKETT, Stony Point, Tenn.** 120

**BUFF ORPINGTON DUCKS**—For genuine Buff Orpington Ducks, write **O. K. HOBBS, Hickory Grove, Ky.** 119

**WHITE RUNNER DUCKS**—Great layers, stock and eggs, and ducklings. **WOMAN'S COLLEGE, Meridian, Miss.** 119

**BUFF ORPINGTON DUCKS**—Stock and eggs. **RALPH PLACE, Meshoppen, Pa.** 120

**INDIAN RUNNERS**—11 eggs 60 cents. **AN-NIS SIMS, Cullman, Ala., Route 5.** 119

#### GAMES.

**FOR SALE**—Cornish Indian Cockerels, as fine as ever crossed the waters. Write me. **J. O. RUTHERFORD, Hampton, Ga.** 119

**CORNISH AND HEATHWOOD EGGS**—\$2.00 per 13. Dark, white and white laced Red. Circular free. Also one of the best dairy farms in New York State. **C. D. SMITH, Fort Plain, N. Y.** 119

**BALDWIN'S FAMOUS WHITE CORNISH**—Eggs from heavy weight prize winners at \$1.50. White Leghorns, Young's strain. Eggs at \$1.50. Satisfaction guaranteed. **G. M. BALDWIN, Temple, Ga.** 120

#### HAMBURGS

**SILVER, SPANGLED HAMBURGS**—Winners at big shows for 12 years; correct shape, color, size; originator "Beauty Spot" strain. Best eggs \$2.50 for 15; \$4.00 for 30. Circular free. **CHARLEY LAUGHLIN, Bloomfield, Indiana.** 120

**SILVER SPANGLED HAMBURGS**—Eggs 15, \$1.00. **MADISON ALEXANDER, Route 2, Somerville, Tenn.** 119

#### BLACK LANGSHANS

**BLACK LANGSHANS**—Exhibited Vitality Black Langshans this season in Atlanta, Knoxville, Washington. Winning seventeen firsts and one sweepstake from twenty entries. Fine males, eggs and stock for sale. Write me your wants. I will satisfy you. **JAMES R. BROWN, Wytheville, Va.** 127

**BLACK LANGSHANS**—1913 champions—Firsts; specials; \$50.00 Sweepstake trophy. Eggs—First yard—all prize winners—\$3.00 per 15. Second yard, headed by prize winner, \$2.00 per 15. **AUGUST LAWSON, Charlotte, N. C.** 119

**AMERICA'S BEST BREED**—Of Black and White Langshans, eggs \$2.00 per 15. Stock for sale. **HARRY DIXON, Bloomfield, Ind.** 120

#### LEGHORNS.

**WANTED**—Every breeder Single Comb Brown Leghorns to join American Single Comb Brown Leghorn Club. Send application with membership fee, \$1.00, to J. H. Henderson, Secretary, Knoxville, Tennessee. Your hearty co-operation earnestly solicited; kindly favor Secretary with names Brown Leghorn breeders in your neighborhood. Help the Club to promote the "Browns." 127

**S. C. W. LEGHORNS**—Large, well matured; heavy laying; quality birds. Eggs \$1.25 per 15; \$6.00 per 100. **AUGUST LAWSON, Charlotte, N. C.** 119

**S. C. BROWN LEGHORNS**—First cock, first hen, Charlotte, December, 1913. Eggs \$2.00 per setting. **L. W. THOMASON, 507 Worthington Ave., Charlotte, N. C.** 119

**ELLISON'S UNDEFEATED SINGLE COMB BROWN LEGHORNS**—Are first prize winners wherever shown. Eggs for sale. Mating list and winnings free. **ELLISON POULTRY FARM, Franklinsville, N. C.** 119

**S. C. WHITE LEGHORNS**—Layers of the best strains in the world; eggs \$1.50 and \$2.00 per setting. **MRS. R. J. PLEAS, Chipley, Florida.** 119

**S. C. W. LEGHORNS**—Fine laying strain; hatching eggs, day old chicks. We do custom hatching. Write for particulars. **CUNNINGHAM POULTRY FARM, Lancaster, South Carolina.** 120

**S. C. WHITE LEGHORNS**—Eggs for hatching from best laying and exhibition strain in South. **C. W. MOODY'S LEGHORN FARM, Asheville, N. C.** 118-tf

**SINGLE COMB WHITE LEGHORN EGGS**—\$1.50 per 15; from my prize pens. **LEGHORN FARM, P. E. Parker, Route No. 2, Hampton, Georgia.** 119



**SINGLE COMB WHITE LEGHORNS**—That lay and win and I can prove it; circular free, or order directly; 15 eggs \$2.00. K. DITTMER, Napoleon, Ohio. 120

**SPECIALTY BREEDER OF WYCKOFF'S S. C. WHITE LEGHORNS**—Greatest laying strain; 50 hens for sale \$1.00 each; eggs for hatching \$5.00 per 100. MRS. L. F. STRANGE, Guthrie, Ky. 119

**EVANS BUFF LEGHORNS—BUFF P. ROCKS**—Eggs \$1.50 setting. Excellent winter layers; good color and type; order today. W. W. EVANS, East Station, Nashville, Tenn. 119

**WHITE LEGHORNS**—One pen White Leghorns for sale; something good, \$8.00. OAKLAND STOCK FARM, A. S. Bell, Mgr., Route 13, Knoxville, Tenn. tf

**S. C. WHITE LEGHORN**—Eggs for hatching from our best pens made up of our Madison Square, Baltimore and Richmond winnings, 1st cock; 1st pen; 1st pullet; 2nd pullet. Silver cup for best display. \$7.50 per 15. Select utility mating \$2.00 per 15. F. F. V. POULTRY FARM, Joseph Reiff, Manager, Meadow & Broad Sts., Richmond, Va. 119

**SINGLE COMB BROWN LEGHORN**—Eggs for hatching, from bred-to-lay, healthy, vigorous stock. 75c per setting of fifteen, or \$4.50 per hundred. A pleasure to answer questions. H. C. HODGES, Weatherford, Texas. 120

**SINGLE COMB BLACK LEGHORNS**—Great winter layers of white eggs. Write for circular telling about them. WM. C. MERRILL, North Sanford, N. Y. 120

**EGGS FOR HATCHING**—Wyckoff's heavy laying strain White Leghorns, \$2.00 per 15 delivered. JOHN R. MCKEE, Route 7, Wesson, Miss. 119

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**MILNER'S MAMMOTH MINORCAS**—The big success of the age. Breeding Mammoths in your territory is the most promising business opportunity ever offered. Write us without delay. Eggs and baby chicks. Dept. D., MILNER'S MINORCA FARM, Watertown, N. Y. 119

**S. C. BLACK MINORCAS**—Strictly first prize winners in strong competition; eggs \$2.00 per 15; stock and eggs guaranteed. WEST END POULTRY YARDS, Waynesboro, Va. 119

**BUFF MINORCAS**—Latest standard variety and coming breed; photos; catalog; address O. K. HOBBS (Specialist) Hickory Grove, Kentucky. 119

**GIANT SINGLE COMB BLACK MINORCAS**—Chicago and Indianapolis winners; mating list free; utility \$1.50, championship \$4.00 for 15 eggs. J. LEWTON, Elwood, Ind. 119

**FOR THE BEST IN BRED-TO-LAY AND WIN**—S. C. Black Minorcas; see ad. on page 385. HARLEY L. WILLIAMS, Route No. 1, Box 1-H, Moultrie, Ga. 119

## ORPINGTONS

**BUFF AND WHITE ORPINGTONS**—Large, handsome, vigorous birds; recent success at Birmingham, Ala., and Lexington, Ky., state shows, prove I am breeding the kind that win. Stock and eggs, reasonable prices. DR. C. L. GRAY, Route No. 17, Lebanon, Tenn. 119

**FOR THE BEST ORPINGTONS**, any variety, including Blue, you must send to their originators. Send ten cents for illustrated catalogue. WILLIAM COOK & SONS, Box H, Scotch Plains, New Jersey. 125

**S. C. BUFF ORPINGTONS**—Eggs from the originator's stock; some of the best; pen Nos. 1 and 2, \$3.00 and \$1.50. MRS. R. J. PLEAS, Chipley, Florida. 119

**WHITE ORPINGTON FARM**—Is closing out twenty-months-old breeders cheap. White Orpingtons and Barred Plymouth Rocks; eggs and chicks reduced. GEORGE GARMANY, Savannah, Ga. 120

**ROSE COMB BLACK AND WHITE ORPINGTONS**—World's best; circular free; write today. CLARENCE E. WALLER, Marshall, Michigan. 119

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**WHITE ORPINGTONS**—Kellerstrass strain, descendants of champion Madison and Lady of the show; 15 eggs \$1.50; stock for sale; mating list free. J. H. WINTERS & SON, Adams, Tennessee. 120

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**WANTED, PEAFOWLS**—State number, price, age and sex in first letter. MISS MARIE BOATWRIGHT, Monetta, S. C. 121

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**ACCLIMATED SOUTHERN BRED PIGEONS**—Hustlers, 8 to 10 pair squabs a year easy with a good health grit. Swiss Mondaines \$4.00 pair; Carneau, \$2.50 pair; Homers, \$1.50 pair; large Homer cocks, 50 cents each. Easy-on Double No. Pigeon Bands 1c each. Blue Ribbon Medicated Health Grit \$2 per hundred pounds. 2c stamp for samples. GEO. A. COLLINS, 511 Luttrell St., Knoxville, Tenn. 125

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**EGGS**—From my Ringlet strain of Barred Plymouth Rocks; prize winners; also White Indian Runner Duck eggs; fine layers. MRS. JOHN F. PAYNE, Charlottesville, Va. 119

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## SHELLZOK'S FORMULAS

### "GOOD-BYE LICE"—Formula No. 2.

The following makes a sure killer of lice and also is good as a disinfectant. It destroys the poisons of contagious and infectious diseases:

Crude carbolic acid.....12 ounces  
Gasoline .....1 gallon  
Oil of tar .....6 ounces  
Sulphur .....4 ounces  
Bisulphate carbon .....11 ounces  
Kerosene .....1 gallon

Mix thoroughly when preparing and also just before using.

Directions for use:—With a brush paint the walls, floors, nest boxes and dropping boards thoroughly. In special cases paint the bottom and sides of a box and confine the fowl therein, covering the box with a sack for about three hours. If you wish to note the effect put a white cloth on the bottom of the box before putting in the fowl. Do not put chicks in the box. It will be sufficient to subject the mother hen to the special treatment as the odor from her feathers will kill the lice on the chicks. For lice on stock paint a cloth and throw over them, or rub the infested part with a cloth that has been partly saturated with the mixture and squeezed out.

### Diarrhoea in Poultry.

The causes of diarrhoea are various, but the most common are exposure to cold, worms, impurities in food, acidity of bowels.

#### Formula:—

Sub-nitrate of bismuth.....2 grains  
Peppermint water .....1-2 ounce  
Tincture of iron .....20 grains  
Powdered opium .....1-8 grain

Put the above in a quart of drinking water.

### Croup, (Bronchitis.)

This is a most distressing disease.

Symptoms:—A permanent laborious and suffocating breathing, a peculiar noise in breathing, expectoration of purulent matter, which continually threatens suffocation.

#### Formula:—

Tincture of lavender .....2 grains  
Tincture of aconite .....8 drops  
Tincture of Bryonia .....7 drops  
Tincture of Spongia .....7 drops  
Alcohol .....2 ounces

Two teaspoonsful in one quart of drinking water.

### Rheumatism in Poultry.

It is said to be due to the presence of lactic-acid in the blood. Rheumatism is a very painful affliction and is most frequently brought on by exposure to wet and cold.

Symptoms:—Leg weakness, swollen joints, locomotion difficult.

#### Formula:—

Salicylic acid .....2 grains  
Epsom salts .....4 grains

The above is a dose. Give this twice daily.

### Improved Condition Powder for Poultry.

The following represents the analysis of a standard product:

Iron sulphate .....1-2 ounce  
Alum .....3 ounces  
Ginger .....1 ounce  
Salicylate soda .....1-2 ounce  
Fenugreek .....3 ounces  
Resin .....1 ounce  
Gentian .....1 ounce  
Red pepper .....1 ounce  
Corn meal .....20 ounces

Mix thoroughly. When symptoms of disease appear mix a tablespoonful of this improved condition powder with regular feed of 12 fowls, and continue this treatment until the symptoms of disease disappear.

### Sore and Weak Eyes—Poultry

Boracic acid .....1 ounce  
Rain water .....5 ounces  
Laudanum .....1 drachm

Directions:—3 drops in each eye twice daily. Use an eye dropper. In severe cases of eye



trouble, anoint the inner part of the eyelids with an ointment made of 6 grains of finely powdered iodoform in one ounce vaseline.

#### Colds in Poultry

Quinine in 1 grain doses is about the best remedy for colds. Administer the quinine every four hours. Put the following in 1 pint of drinking water:

Spirits of camphor .....16 drops  
Sugar .....1 tablespoonful  
Brandy .....8 tablespoonsful

Give no other drinking water. Put the afflicted fowl in a warm room, near stove.

#### Frost Bites

Frozen comb cannot be saved if it is so affected that it is black. Treatment should be given, however, to relieve pain. For frozen comb, frost bites in comb or feet the following is recommended:

Lard .....3 ounces  
Oil of peppermint .....30 drops  
Quinine .....1 ounce

Heat the lard and add the other ingredients, stirring vigorously. Apply this salve to affected parts. Use only the pure oil of peppermint as the essence will not have the desired effect.

#### Diphtheric Roup in Poultry

Chlorate of potash.....1-2 drachm  
Syrup of lemon .....1 ounce  
Water .....4 ounces

One teaspoonful every four hours.

#### GEESE IN SPRING

The goose is a good mother and takes great care of her young. When the goslings are out they must not be allowed on ponds, as cold water is detrimental, causing cramps by chilling them. The old geese are better for breeding purposes than those that are young. It takes the eggs four weeks to hatch. The best food for them is clover hay, cut fine, and scalded or cooked turnips. Bran and ground oats may be sprinkled over the mess. Geese prefer bulky food, hence they should not be fed on grain entirely, or they will prove unsatisfactory as layers, and their eggs will not hatch.—Ex.

#### ESSENTIALS IN FOOD

There is no single food which is perfect, or which contains all the desirable elements necessary for production, for which reason corn as an exclusive diet will not give satisfactory results. There is but little lime in wheat or corn, and as lime is essential in the production of bone it is evident that young chicks will make but little growth when the larger portion of their food consists of corn and cornmeal. If clover, either green or cured, or skim milk is fed with corn, more benefit will be derived from the combination than from the grain only. Animal food should be also allowed.—Ex.

Growth and development require both quantity and quality of food, in order to build up good, solid frames, and give strength and vitality to the growing stock.

A well selected and well fed flock of pullets will average one hundred and fifty eggs in twelve months.

**FOR SALE! WHITE PLYMOUTH ROCK**—Baby chicks and eggs for hatching from prize winning birds. **HIGHLAND POULTRY YARDS, 1707 Oak St., Chattanooga, Tenn.** 120

**HEAVY LAYING STRAIN BARRED ROCKS**—and Rose Comb Reds, \$1.50 per setting. **RAY HOLLAND, Switz City, Ind.** 119

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**EGGS**—One fifty per setting; five dollars per hundred from healthy, large boned, vigorous farm raised Barred Rocks. Try me for the best. **CECIL R. SWAIN, Zionsville, Ind.** 120

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**S. C. RHODE ISLAND REDS**—S. C. Brown Leghorns. High class utility; stock and eggs. **MRS. R. H. WILLIAMS, Guthrie, Kentucky.** 121

#### RHODE ISLAND WHITES

**RHODE ISLAND WHITES**—The greatest Rhode Island White farm in the world. Rose and Single Comb stock; eggs and baby chicks. Write for catalogue. **HENRY EICHELHANN, Route, No. 4, Waterloo, Ill.** 120

**R. C. RHODE ISLAND WHITES**—Peerless and Excelsior strains. White Wyandottes, Jackson and Fishel strains; eggs for hatching; write for mating list; satisfaction guaranteed. **J. T. PATRICK, Route No. 2, Vernon, Ind.** 120

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**WHITE HOLLAND TURKEY EGGS**—11 for \$3.00; White Orpington eggs, 15 for \$2.00; White African Guinea eggs, 16 for \$1.50; White Runner Duck eggs, 13 for \$2.00; special price on more than two settings. **J. I. EDINGTON, 16 Mkt. Sq., Knoxville, Tennessee.** 119tf

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**REGAL WHITE WYANDOTTES**—Bred for eggs, size, vigor and show points. Open front houses, blue grass runs, 1913 show record: Best display Wytheville and Roanoke; first cock Richmond (one entry). **F. H. CRAIGHILL, Wytheville, Va.** 121

**PARTRIDGE WYANDOTTES**—My birds are mated and the eggs will hatch. Write for mating list; it is free. **N. B. NELSON, Conway, Ark.** 119

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DUCKS—15 eggs, either kind, \$2; 30, \$3.  
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Have bred them 12 years. Now have won over 100 and special prizes. At Charlotte, N. C.,  
December, 1913, Drevenstedt, judge, I won 1st cock; 1st cockerel; 1st, 3rd and 4th pullet. At  
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TITLES TO REAL ESTATE



JOHN GODDARD was the owner of  
an Iowa farm which he leased to  
James Elickson for the year 1890.  
On the second day of May in  
this year an aerolite passed over  
Northern Iowa. Peter Hoagland  
lived on a farm adjoining the

Goddard property and it chanced that a mem-  
ber of his family watched the meteor and  
saw it plunge to earth on the adjoining prop-  
erty. Being told of this and directed to the  
spot where it seemed to fall, Hoagland went  
onto the Goddard farm the next day and  
discovered the meteorite buried in the ground  
to a depth of three feet. Elickson, the ten-  
ant, was present, but offered no objection, and  
Hoagland dug up the visitor from the heavens  
and transported it to his house, claiming it  
for his own—probably believing in the doc-  
trine of "finders keepers."

Three days later, as opportunity offered,  
Hoagland sold the meteorite to H. V. Winch-  
ell, then Professor of Geology at the Univer-  
sity of Wisconsin. When John Goddard heard  
of this he immediately felt that as the aere-  
lite had fallen on his property it had become  
his and that Hoagland had no rights therein.  
He decided to enforce his rights against Pro-  
fessor Winchell. Winchell having purchased  
from Hoagland had no better rights than the  
man from whom he bought. If Hoagland had  
no rights to the meteorite Winchell could not  
retain it against the claims of the rightful  
owner.

The court which tried the case ruled that the  
finder had no rights in the fallen mass, but  
that it became the property of the person who  
owned the land upon which it fell. Thus  
when it fell upon Goddard's farm it became  
part of that farm, real property belonging to  
Goddard. The court viewed it as much a part  
of the farm as the stones that might be upon  
it. They insisted it was not lost matter with  
no owner to which any finder might lay claim.  
In deciding the case the judge said:

"Through the action of the elements, wind  
and water, the soil of one man is taken and  
deposited in the field of another; and thus all  
over the country, we may say, changes are  
constantly going on. By these natural causes  
the owners of the soil are giving and taking  
as the wisdom of the controlling forces shall  
determine. By these operations one may be  
affected with a substantial gain, and another  
by a similar loss. These gains are of accre-  
tion, and the deposit becomes the property of  
the owner of the soil on which it is made."

Thus we notice the rule of law that changes  
made by natural forces must be allowed to  
stand. If a river washes away a portion of  
a person's land, that soil cannot be pursued  
and brought back. An owner may keep it  
at home, but once gone his title has van-

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ished. If by the action of the waters, or the winds, or any other natural forces additions are made to the body of a person's land the additions become part and parcel of the land and the property of the owner of that land. These additions are what the law terms accretions.

John Deerfield owned a tract of land through which ran Buck Creek. He sold to Alson Arms a farm of about sixty acres, one boundary being Buck Creek. Buck Creek gradually shifted its course, year by year, depositing soil against Arms' land. In the course of a few years several acres had thus been added. Deerfield claimed that this property had not been transferred to Arms but that he still owned it and could use or transfer it. He contended this the more strongly as he still owned the property on the other side of the stream upon which the stream had encroached thus leaving additional land upon the other side. He insisted that the property lines should remain as they were when he granted the land and that the soil left by the stream when shifting across properly belonged to him. The court refused to adopt his view and ruled that the added soil which had come to Arms gradually, year by year, was his, and that Deerfield could not follow what had been lost to him by the forces of nature.

John Halsey and Warren McCormick owned farms on opposite sides of Mad River, the stream forming the boundary between them. One spring day when the water was running at flood tide the river broke through onto some low land on Halsey's property cutting its way across a neck of land and eventually establishing a new channel within Halsey's boundaries leaving several acres on the other side of the stream. McCormick claimed that as the river was the boundary between their properties he now held title to the new channel, just as though the stream had shifted gradually cutting away ground from the inside of the bend on Halsey's land and depositing the soil on the outside of the bend on his land. The differences between the men were taken to court and was ruled that the boundaries of the farms remained those of the original channel, the sudden change not affecting the title of either party. They had formerly held to the thread of the old stream and now their boundary was the line that had marked the thread of the old channel.

Thus a distinction is drawn between gradual and sudden changes. Sudden shifting of streams does not work changes in the boundaries of property, whereas the gradual shifting means a shifting of boundaries. Thus to amount to accretion which will give title to the owner against whose property the new soil is deposited the process must be imperceptible. The rule laid down by the law to determine whether a change has been imperceptible is that to be imperceptible it must be so gradual that observers cannot see the process going on, and if they cannot it is imperceptible even though observations at considerable intervals disclose that a change has taken place.

In the case of property bordering on a non-navigable stream or small lake the owner takes title to the center of the body of water. In the case of a stream the thread of the stream—the center of the main channel—is the boundary of a tract granted with the stream as a boundary. In such cases the owner of land adjoining the water owns land under the water as well. Of course, land may be granted merely to the high water mark, the rights to the land under water being reserved, but this is unusual. The owner of land bordering on a stream who also owns the land under water may extend his property by filling in so long as he does not interfere with the course of the stream, or interfere with any rights of the public or of private parties. If an island appears in a body of water it becomes the property of the person who owned the land under the water upon which it was formed. If the owner of the land adjoining a stream owns to the center of the streams, islands forming on his side of the stream become his property. Islands forming in the center of the stream are divided according to the old boundary line.

Cases have arisen where islands and other lands have been submerged and have subsequently reappeared. In such instances the former owner regains his possession and title.

It is stated above that land owners own to the center of non-navigable waters. In the case of navigable water the public, generally speaking, holds the title to the bed. Thus islands forming in navigable streams would belong to the state and the state may resist

all extensions of the property adjoining the navigable water past the normal edge of the stream or lake.

The courts have no little difficulty in determining whether waters are navigable or not and the various states are in conflict. The old English rule was that waters in which the tide ebbed and flowed were navigable and waters not affected by tides were not navigable, whether they were used by large boats for purposes of commerce or not. This rule has been adopted in many of the American states. In England where the large rivers are affected by the tides the rule fitted fairly well with the facts, but in some states which follow the rules, there are no tidal waters, and so all waters in the state are ruled as non-navigable in law though they are navigable in fact. Many states rule all rivers navigable in law which are navigable in fact.

But in the great majority of cases the owner of property adjoining a stream of ordinary size, or a small lake, has title of all the land under the water to the thread of the stream or the center of the lake.

### POINTED PARAGRAPHS

A hen will not lay unless she is comfortable. Houses should be dry, light, well ventilated and free from drafts.

Dry earth sprinkled on the floor of the roosting house helps to keep down the foul odor and makes the house easier to clean next time.

Fowls that have free access to a box or hopper of bran seldom have bowel trouble, as bran will keep the bowels in good order.

While the hen houses must not be kept too warm, they must be dry and free from drafts if you wish your fowls to be healthy.

Cover the floor with cut straw and corn shucks to a depth of six or eight inches for the hens to scratch in for the grain food during the cold weather.

How many non-producers have you in your flock? Better find out at once as every one of these star boarders is a profit eater and you can't afford to supply that kind of diet.

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**PULLETS**—\$2.00 each, Northern bred, Bean strain. **MRS. FLORENCE FRENCH, Fabius, N. Y.** 120

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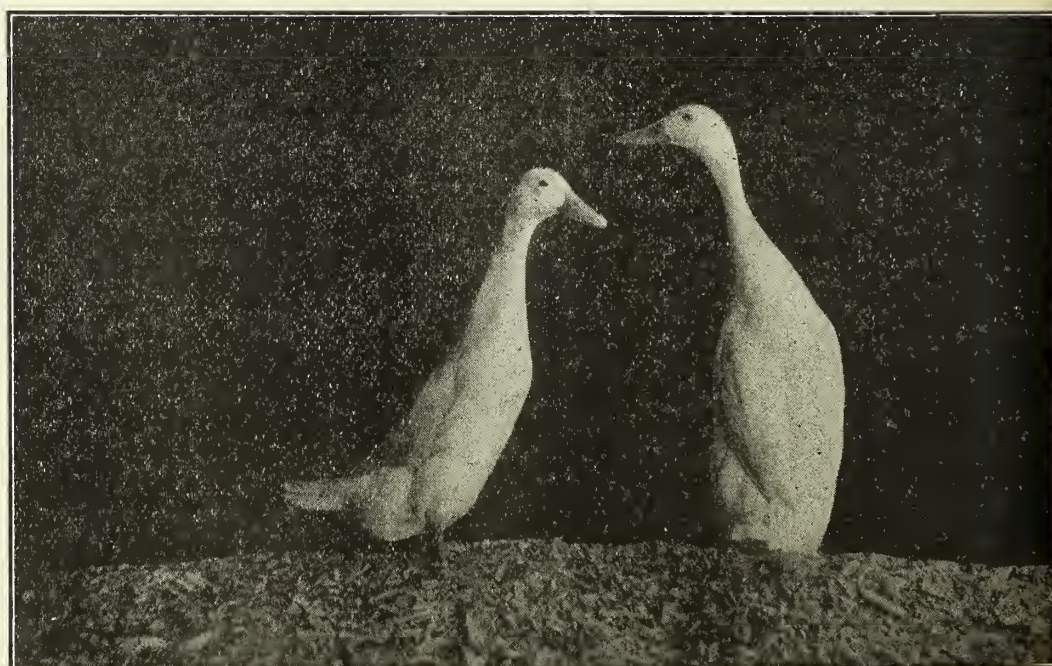
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Immediately after dressing poultry it should be thrown in ice-cold water and allowed to remain until all the animal heat has left the body. Neglect to do this is apt to cause the carcass to turn green in parts by the time the destination is reached.

There is no better time to get a start in pure-bred stock than in the autumn. A good pen, or trio, purchased now, and rightly cared for, will make a splendid foundation for a future flock. The second year from starting would give one a flock large enough for the average farm. Taking it all in all, it is the cheapest and best time.

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The South's Oldest, Largest and Best Farm Magazine, and **THE INDUSTRIOUS HEN**, both for one year 50c. **INDUSTRIOUS HEN CO., Knoxville, Tenn.**



Madison Square Garden winners. 1st young White Runner Drake and 4th duck at Madison Square Garden show, 1914. Owned by Chiles & Co., Mt. Sterling, Ky.



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If you could see the 7 grand pens of White Orpingtons I have mated for the season's egg trade, you would surely say they have the quality. Each pen headed by a winner mated to produce strong, true Orpington type, with purity of white color. My Whites have won 300 prizes, cups, A. P. A. and club medals, as well as best displays; best birds in shows at our leading exhibitions, and known the country over as one of best strains. If you are looking for real high quality, I can supply you. Mating list explains fully.

F. S. BULLINGTON, Secretary-Treasurer American White Orpington Club

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Box H

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RICHMOND, VIRGINIA

## ANCONA EGGS

Get your eggs for hatching from winners at Sequachee Valley Fair, Tennessee State Fair, Augusta and Chattanooga Poultry Shows. Exhibition pens, eggs \$5.00 and \$3.00 per 15. Free range utility stock eggs, \$1.50 per 15.

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## LOYD'S PRIZE-WINNING PARTRIDGE ROCKS

Big winners at the big shows for several years. Stock for sale at all times. Our free mating list is ready. It tells all about our birds, and gives their winnings at Boston, Chicago, Cleveland, Cincinnati, Indianapolis, Indiana and Tennessee State Fairs, Columbus, etc. We are sure we can please you. Write us today.

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Box 26-J

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GREENSBURG, INDIANA

## BARRED PLYMOUTH ROCKS

I do not believe there is a man in America today that is in such a good position to give you value in Barred Rocks as I am. My yards are teeming with quality, and if you will call on me I will share it with you. There is no merit in claiming "Best in the South," because every man who wins a few prizes at some little show makes this claim, and besides I have either defeated in the show room or sold birds to nearly all the Barred Rock men claiming "Best in the South." I can and will help you; my 25 years experience is at your service. Send for catalogue, and book your egg orders early, because the supply is limited. Quality, not quantity.

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## Single Comb REDS--BARRED ROCKS of Quality

Six pens mated, three of Reds, three of Rocks; every bird a jewel; absolutely not a poor specimen in any of these matings; all winners or fully competent to win in hot company; 12 firsts, 5 seconds, 2 fourths, \$15.00 in gold best pen, at three leading shows, 1913. Bred for eggs and meat as well as for exhibition purposes, 12 years a breeder, everything guaranteed to please; a few eggs from these grand matings will do you good; mating list ready. Eggs, \$3.00 per 15; \$5.00 for 30.

L. A. CLAYTON

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Box 135-C

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COALING, ALABAMA

## Get CALLAWAY'S S.C. REDS

## EGGS = BABY CHICKS = STOCK

My winnings at Knoxville, Hagerstown, Augusta, Atlanta and other leading shows prove the superb quality of my stock. My hatches this season have been successful beyond all expectation, and I can fill all orders promptly for either eggs, baby chicks or stock.

**HEN AND 15 CHICKS FOR \$5.00**

**EGGS AND STOCK PRICED ON APPLICATION**

If you don't want to get left this fall, you had better set every hen as soon as possible. NO BETTER REDS IN THE SOUTH THAN CALLAWAY'S. Order today and do not wait until the last of the season.

MRS. P. T. CALLAWAY,

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## MEYER'S CHAMPION STRAIN OF LANGSHANS

Swept the deck at the Little Rock, Ark., and the St. Louis shows this season, winning nine firsts out of a possible nine. They have been winning at America's best shows in the last few years. If the best is what you want I have the goods. Eggs from all pens, \$2.50 per 15, or \$4.50 for 30. Write for my free circular. It tells all about them. Yours for better Langshans.

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# HERE'S YOUR CHANCE!

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## SPAUGH, THE BARRED ROCK MAN

I have the birds with the records behind them, and birds that won first honors at Indianapolis, Cincinnati and other big shows the past season. My Rocks are unexcelled. Have fourteen yards mated especially for the egg trade.

**EGGS--\$15, \$10 AND \$5 PER 15--EGGS**

Can supply eggs from utility matings at \$1.50 and \$2.00 per 15. Incubator eggs, \$7 and \$12 per hundred. All orders promptly filled. Several hundred show and breeding cockerels, also cocks, hens and pullets for sale. Mating list, winnings and further information cheerfully furnished upon request.

C. E. SPAUGH

BOX 5

RUGBY, INDIANA



First Buff Orpington Cock, Columbia, S. C., October, 1913. Bred and owned by DeWitt C. Bacon, Guyton, Georgia.

## On MAY FIRST

Matings will be broken up for the summer months. I am going to offer any or all of my splendid breeders for sale, on and after that date. I can let them go cheap, as I have over two thousand superb youngsters coming on, those hatched in the fall, laying already. My exhibition matings, the best I ever put together, consist of the following: 5 pens White Leghorns, 4 pens Buff Orpingtons, 5 pens White Plymouth Rocks and 5 pens S. C. Reds, besides several hundred head of utility birds of each breed. Be prompt, and write for description and prices, and reserve what you will need. Eggs for hatching from above pens, until May 1st. Day old chicks until May 21st. Why not get my mating list? It's free, and it's interesting.

**DeWITT C. BACON, 88 Springfield Ave., GUYTON, GEORGIA**

## BUFF PLYMOUTH ROCKS

Great record at Missouri Egg Laying Contest. One pullet tied for the lead with two others in February, out of 1040 hens. Four totaled 95 eggs for the month, which is better than four hens in any other pen in the contest. You need some of this laying strain. They are exhibition as well, and among the best in the country. Eggs \$4.00 for 15; \$10.00 for 50, shipped direct by the officials of the contest.

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are generally recognized as the South's leading strain of these two grand breeds. Ask the judges. Our wonderful winnings at the recent National Conservation Show, Knoxville; Atlanta, New Orleans and Chattanooga have created a sensation. You can't afford to be without blood lines from Efficiency Strain. We have reached the highest development in Barred Rocks and S. C. White Leghorns. Our beautiful poultry farm, located on historic Lookout Mountain, is acknowledged by all who visit it, to be a model plant and our specimens delight the eye of the most critical fancier.

EGGS FROM OUR EXHIBITION BARRED ROCK PENS, \$6.00 PER SETTING  
EGGS FROM OUR EXHIBITION S. C. WHITE LEGHORNS, \$4.00 PER SETTING

Ask the Judges' and send for beautiful catalogue.

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